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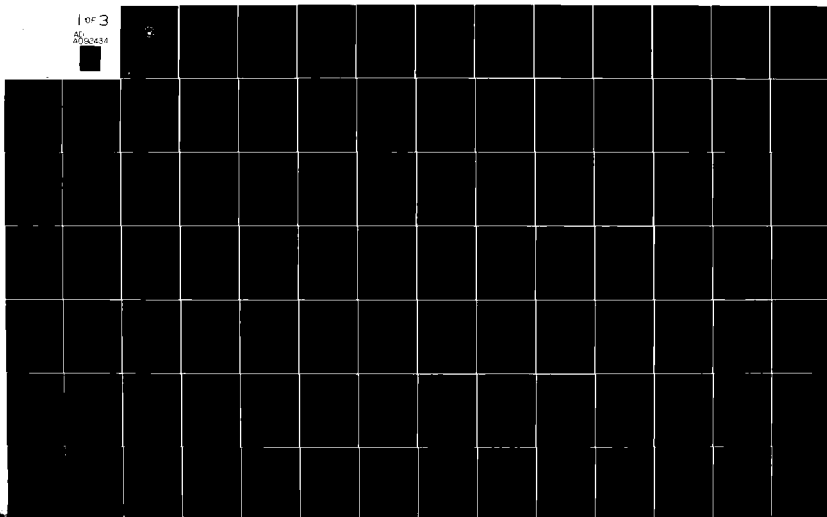
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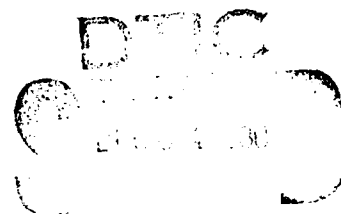


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Monterey, California



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THESIS

COST IMPACT ASSESSMENT OF
COST ACCOUNTING PRACTICE CHANGES

by

James S. Anderson

September 1980

Thesis Advisor:

David V. Lamm

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Cost Impact Assessment of Cost Accounting Practice Changes

by

James S. Anderson
Lieutenant, Supply Corps, United States Navy
B.S., University of Notre Dame, 1972

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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ABSTRACT

This thesis represents the results of research on cost impact assessment of cost accounting practice changes to Cost Account Standards-covered contracts. The objectives of the research were to explore the current environment in which cost impact is measured and to develop a structured approach to aid the decision-maker in the assessment. The requirements of the Cost Accounting Standards and Administration of Cost Accounting Standards Clauses, the regulatory guidance available to Department of Defense contract administrators and the pricing methodologies utilized to assess cost impact were investigated. The Cost Accounting Standards administration process was modeled and utilized to construct a sequential, streamlined set of procedures with which the cost impact assessment process can be approached. A need for greater guidance from DOD on the process, an amendment of the Administration of Cost Accounting Standards Clause, a better system of tracking the Contract Universe and the introduction of flexibility into the choice of methodologies was recognized.

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I. INTRODUCTION

A. EVOLUTION OF THE COST IMPACT ASSESSMENT PROCESS

The Cost Accounting Standards Board (CASB) was born out of Congressional concern over "the lack of uniform accounting standards...in Government procurement..."¹ During 1968, debate in the House of Representatives Banking and Currency Committee, over extension of the Defense Production Act of 1950, became the vehicle to voice this concern. House Resolution 17268, which would have required the Comptroller General of the United States to formulate uniform cost accounting standards, was subsequently altered in the Senate to mandate:

...The Comptroller General, in cooperation with the Secretary of Defense and the Director of the Bureau of the Budget...[to] undertake a study to determine the feasibility of applying uniform cost accounting standards to be used in all negotiated prime contract and subcontract procurements of more than \$100,000.²

In January 1970, the Comptroller General reported to Congress:

It is feasible to establish and apply cost-accounting standards to provide a greater degree of uniformity and consistency in cost accounting as a basis for negotiating and administering procurement contracts.³

¹Admiral Hyman G. Rickover, as cited in U.S. Congress, Senate, 26 June 1968, Congressional Record, p. 18848.

²Public Law 90-379, Section 718.

³Comptroller General of the United States, "Report on the Feasibility of Applying Uniform Cost-Accounting Standards to Negotiated Defense Contracts," to the Committee on Banking and Currency, House of Representatives, 91st Congress, Second Session, January 1970, p. 2.

During the next biennial debate over its extension, the Defense Production Act of 1950 was amended by Senate Resolution 3302 which proposed the establishment of a Cost Accounting Standards Board as an agent of Congress. S-3302 cleared both Houses of Congress and was enacted as Public Law 91-379 of 15 August 1970. In part, it reads:

The Board is authorized to make, promulgate, amend and rescind rules and regulations for the implementation of cost-accounting standards.... Such regulations shall require defense contractors and subcontractors as a condition of contracting...to agree to a contract price adjustment, with interest, for any increased costs paid to the defense contractor by the United States because of the defense contractor's failure to comply with duly promulgated cost accounting standards or to follow consistently his disclosed cost-accounting practices in pricing contract proposals and in accumulating and reporting contract performance cost data.¹

The first promulgations of the Board were published in the Federal Register on 29 February 1972. Included were: Part 331, "Contract Coverage;" Part 351, "Disclosure Statement;" Part 400, "Definitions;" and the first two of what would become a body of Cost Accounting Standards (CAS), Parts 401 and 402.

The contract clause contained within Part 331 requires the contractor to agree to a contract price adjustment if a material shift in costs allocated to the contract results from a required or discretionary variation in his cost accounting practices. The cognizant Administrative Contracting Officer thus becomes charged with assessing the cost impact, i.e., the shift in costs, of the variation in practices and, subsequently, making the adjustment to the negotiated price appropriate to the situation.

The accounting mechanics of the assessment, evaluation and negotiation of cost impact related to cost accounting practice changes were unknown

¹Public Law 91-379, Section (h)(1).

territory to field contract administration in 1972. Nonetheless, with the advent of Cost Accounting Standards legislation, Federal agency (most notably, Department of Defense) implementing regulations, and the anticipation of a growing catalog of Cost Accounting Standards, the Administrative Contracting Officer became responsible to:

...negotiate price adjustments and execute supplemental agreements pursuant to the Cost Accounting Standards Clause in [Defense Acquisition Regulations] 7-104.83.⁵

The talents and procedures necessary to fulfill this responsibility were unlike those utilized in pricing or costing contract change orders or excusable delays. No new costs were introduced to the system of contracts as a result of a manipulation of cost accounting practices, nor were costs deleted. Instead, the actual assignment and allocation of costs through the contractor's accounting system had to be traced. In its earliest stages, the implications of the charge to assess cost impact were neither widely understood nor appreciated in the acquisition arena.

At this writing, after over eight years of experience and continuing refinement of regulations governing the process, the requirement to prohibit increased costs paid by the United States and the desire to keep the contract parties whole in the face of desirable or required changes to the contractor's accounting practices remain a significant challenge to the Administrative Contracting Officer. One highly placed official in a Defense Contract Administration Services Region headquarters has referred to the assessment

⁵Defense Acquisition Regulations (hereinafter, "DAR"), para. 1-406(c). (On 8 March 1978, the Armed Services Procurement Regulations were officially redesignated the Defense Acquisition Regulations. All references in this study, the date of the source notwithstanding, will utilize the current designation.)

of cost impact as "the hardest part of Cost Accounting Standards administration." Another former contract administrator interviewed called it "the most complicated accounting, fiscal forecasting and estimating problem in this business...."

B. OBJECTIVES OF THE RESEARCH

The objectives of the research were twofold:

1. To explore the current environment within which cost impact is measured; and
2. To develop a structured approach to guide the decision-maker through the cost impact assessment process.

C. RESEARCH QUESTION

Central to this study was the exploration of the cost impact assessment process, from discovery of the change to final resolution of the issue of cost allocation shifts. Thus, the primary research question posed was: How can the cost impact of changes to, or noncompliance with, cost accounting practices or Cost Accounting Standards be measured?

To respond to the primary research question, the following subsidiary questions were studied:

1. What are the requirements of the mandatory Cost Accounting Standards clause concerning the measurement of cost impact and the nature of DOD and contractor response to these requirements?
2. What guidance, regulatory or otherwise, has been provided DOD contract administrators in this area and, specifically, where is it lacking?
3. What pricing methodologies have been developed and are being utilized?

4. Can a model be devised to structure and simplify the real-world accounting variations in which cost allocation shifts or deviations in the measurement of costs are manifested?

D. SCOPE OF THE STUDY

The scope of this research was to examine cost impact assessment within the administration of CAS by DOD. Other issues within the umbrella of potential CAS study, such as the development and interpretation of the Standards, cost-benefit analysis of the CAS system and the present legislative controversy over continued existence of the Board, were not examined. Though CAS is applicable to non-DOD Federal procurement and contract administration, the research centered around its affects within defense contracting, though the analysis that is the result of this research will be general enough to have universal application.

1. Assumptions

This study is intended to provide guidelines to the Administrative Contracting Officer (ACO) to be utilized in the post-award assessment of cost impact. It is written from the standpoint of a non-accountant, albeit one with a rudimentary understanding of cost accounting and a familiarity with the basic applicability of CAS. It is the purpose of this research to design a structured framework within which complex accounting and audit procedures and the general background of the reader can merge for the purpose of better decision-making within the cost impact assessment scenario.

2. Limitations

Actual examples of the accounting transactions involved will be limited to those unique to the CAS environment and highly simplified. This study is not intended to replace standard cost accounting texts or

substitute for experience in cost or price analysis. Instead, this study will approach the cost impact assessment process from a conceptual, decision-making level as opposed to presenting a specific, quantitative, analysis model applicable to raw cost accounting data.

E. RESEARCH METHODOLOGY

1. Literature Search

Much more has been written on the propriety of Cost Accounting Standards than on the day-to-day issues facing the contract administrator. Within the last three years, however, both limited and extensive procedural guidance have become available.

A search of the literature was conducted via the Naval Postgraduate School Library and custom bibliographies were obtained from the Defense Logistics Studies Information Exchange (DLSIE), Ft. Lee, Virginia. Additionally, many materials, of which the researcher was previously unaware or which were available on a regional basis only, were discovered during the course of conducting interviews.

2. Interviews

Due to the paucity of published literature specifically dealing with the research topic, it was determined that interviews with Federal officials, of both policy-making and field contract administration positions, and members of defense industry, would be the most productive source of information. Interviewees who were personally involved on a daily basis with promulgating regulations for, or administering, or accounting for, CAS-susceptible contracts were sought. Although the interviews were structured, they were conducted along conversational lines to allow the researcher to direct questions to the specific strengths and interests of

the subject. Interviews were taped, however subjects were assured that their remarks would not be specifically attributed to them without their express permission. It was felt that the anonymity offered allowed the subjects to frankly express their views on the topic. Interviews averaged two hours in length. Sessions were conducted with nine Government and ten industry representatives.

Telephone conversations, though not utilized extensively, supplemented the data collection when subjects were not available for, or funding precluded, personal interviews.

Appendix C represents a complete list of the interviews conducted.

F. ORGANIZATION OF THE THESIS

The research effort is organized in order to place the cost impact assessment process properly within the defense procurement environment, explore the current guidance given to this aspect of CAS administration and develop a simplified approach to the complex issues involved. It is anticipated that the results of this study will be useful to the Administrative Contracting Officer in making him a better consumer of audit recommendations and, ultimately, a better decision-maker in CAS matters.

Chapter Two explores the significance of Cost Accounting Standards to both the pre- and post-award scenarios. This Chapter discusses the relevance of cost accounting to Government procurement and the nature of the defense industry marketplace that makes CAS necessary. Chapter Three is a thorough discussion of the CAS administration process with concentration on cost impact assessment of changes to cost accounting practices. The current guidance and pricing methodologies available to the ACO are presented. Chapter Four discusses hindrances, inherent in the process, and pricing

methodologies utilized, to the efficient conduct of cost impact assessment. Chapter Five is the development of a structured framework to clarify and simplify the responsibilities of the ACO. A model identifying information required and procedures to be followed is recommended. Chapter Six synthesizes the findings of the research, recommending improvements to the process and responding to the research questions. It additionally suggests areas for further research.

G. DEFINITIONS

Definitions of most of the terms that may be unfamiliar to the reader are contained within the body of this report. Definitions of the more common terms, however, follow:

Cognizant Administrative Contracting Officer - is the ACO charged with the four CAS contract administration functions listed in DAR 1-406(c). Individual contractors are assigned a unique cognizant ACO in order to fulfill the requirement of a single face to industry on CAS matters. The term, "ACO," when it is used in this report, is considered synonymous with cognizant ACO.

Contract Administration - is the Government's management and surveillance of all assigned contracts, from award to the completion of performance, to ensure that the resulting end item, either product or service, received by the Government is in conformance with the contract's terms and conditions.

Covered Contract - refers to any prime or sub-contract awarded with the Cost Accounting Standards clause in force. Contracts to which CAS does not apply will be referred to as uncovered contracts.

Procurement - will be used throughout this report to set off that portion of the acquisition process in which CAS is a concern, namely the pre-award and post-award activities surrounding the performance of a contract.

II. BACKGROUND AND SIGNIFICANCE OF THE RESEARCH

Essential to an understanding of the research is the development of a perspective from which the assessment of cost impact can be examined. In this Chapter, it will be shown that Cost Accounting Standards evolved in response to some unique conditions of the defense procurement marketplace and in recognition of a need for greater market leverage and control by defense procurement agencies. In the course of this discussion, accepted procurement methodologies, contract accounting, the relationship of Cost Accounting Standards to the defense procurement process, both pre- and post-award, and the resultant necessity to be able to assess cost impact of a cost accounting practice change will be examined.

A. THE NATURE OF DEFENSE PROCUREMENT

The economic models offered by classical price theory are incapable of totally explaining the varied ramifications of Government in the marketplace. Certainly some aspects of the phenomenon fit into the simplified models, but a body of knowledge is unavailable that completely captures the character and market interactivity of the Federal Government, "the world's largest business,"¹ in the variety of roles it assumes: sovereign, monopsonist, competitor, primary buyer of high technology, regulator of the economy and implementer of national objectives. As Professor

¹U.S. Commission on Government Procurement, Final Report, prepared by Study Group 1, Part 1, "Utilization of Resources," Volume 2, p. IX-3.

Stanley N. Sherman has stated:

Buying by the Government is so large and varied in scope that few persons, whether Government employee, industrial marketer, policy maker, or interested member of the public, are fully cognizant of the range and dimension of the system being employed.²

A brief excursus into two unique characteristics of defense procurement will lend insight to the development of the research perspective.

1. The Marketplace

In a competitive environment, interaction between buyers and sellers, and the relative bargaining strength of each, brings about a market price which serves to allocate and ration scarce factors of production, or economic resources. The marketplace that surrounds widely-produced and highly-sought goods is a structured economic center within which a set number of dollars are exchanged for an end item. Under "perfect" competition, a potential buyer need be unconcerned with the cost incurred by the offeror in producing the product. Forces of the marketplace will set the prices at which the latter will sell:

In a price competitive market, a seller's price may be related more closely to what his competitors are likely to quote than his own cost of manufacture or acquisition. All else being equal, performance must be effective and economical if the company is to make a profit.³

Over the long run, however, the seller's price is bound by a minima: the costs of production. Additionally, a price set by the seller that is much more than that available from other sources of the end item will drive buyers

²Stanley N. Sherman, Procurement Management: The Federal System, (Bethesda, MD: SLCommunications, 1979), p. 4.

³Armed Services Procurement Regulation Manual for Contract Pricing (hereinafter, "ASPM No. 1"), (Chicago, IL: Commerce Clearing House, Inc., 1975), p. 2A2.

away from him and toward his competitors. Thus, a maxima also exists. Therefore, "[t]he idea that competition results in fair prices must be viewed as a truism...."⁴ Even in the more realistic scenario, something slightly less than perfect competition, a buyer of defense products that encounters or can gauge strong competitive interactions may be assured he is responding to his charge to pay a price no more than "fair and reasonable"⁵ when he consummates a contract at the price set in the marketplace.

Though "...competition among private sector suppliers is a cornerstone of the [defense procurement] system,"⁶ the majority of defense procurement dollars are expended without the benefit of price competition:

DOD procurement data for 1977 shows that less than 27 percent of the nearly \$50 billion in contract awards that year were based on price competition.⁷

Absent the competitive environment that assures a fair and reasonable price, the defense procurement agencies are forced to either rely upon artificial devices injected into the marketplace by legislation designed to replace the competitive forces or to succumb to the unequal leverage exerted by the seller. The latter is seldom a politically feasible option when it impacts upon the expenditure of public funds.

⁴Ibid, p. 2B8.

⁵Ibid, p. 1A1.

⁶COGP Final Report, Part 1, V. 2, p. IX-14.

⁷General Accounting Office, "Impediments to Reducing the Costs of Weapon Systems," Report PSAD-80-6, 8 Nov 79, p. 16.

2. State-of-the-Art End Items

Reasons for the absence of price competition from the defense marketplace among potential offerors are legion. Entry to and exit from the market is not free and unencumbered. High capital investment by sellers is frequently a prerequisite to maintaining a market posture. The statutory and regulatory maze of Federal contracting frightens many potential entrants. Public funding, and therefore, demand, is inconstant. The single largest contributor, however, to the lack of price competition in the defense marketplace is the inherent risk that must be assumed by the seller, or shared by the Government and the seller, in much of the type of performance sought:

...the really vital distinction between the base line market situation (off-the-shelf, commercial procurement) and that surrounding major systems procurement...is that the latter is characterized and often dominated by high technical and economic risk, especially in its earlier phases.⁸

Elements of perfect competition may develop when the end item sought by the Government is well-defined and widely produced. When defense procurement agencies solicit for state-of-the-art, high technology, end items, built to performance specifications, however, price ceases to be the sole deciding factor for award. Performance and schedule competition predominate. Since the manufacture of complex end items is a highly unpredictable activity, a stable, well-functioning marketplace does not exist. Assurance of a fair and reasonable price, therefore, must be found via other means.

⁸Richard M. Bissell, Jr., Technical Risk and the Competitive Process, as cited in COGP Final Report, Part 1, V. 2, p. IX-13.

B. PROCUREMENT METHODOLOGIES UTILIZED

Defense procurement agencies encounter widely varying marketplace scenarios. A continuum of economic conditions exists in the defense marketplace, with well-defined, commercial needs or military agency unique needs to be produced to design specifications, neither of which pose substantial risk to the seller, at one extreme and state-of-the-art, highly complex end items, with opportunities for successful seller performance considerably less, at the other. In recognition of this, two different procurement methodologies are utilized.

1. Formal Advertising

The sealed-bid procurement method, preferred by statute, may be utilized when marketplace forces are sufficient to lead to effective price competition:

Several models exist in which procurement is accomplished on a strategy which attempts to take advantage of market forces. Each of these models is organized around the concept that independent offerors operating freely in an open marketplace will, through their bidding procedures, make priced offers to sell. The offers are treated as being generally reasonable, based upon the operation of the free enterprise system.... [These] strateg[ies] should generate prices that reflect the reasonable cost of performing...[or]...current appraisals of value.⁹

Several other criteria, of course, must be met before formal advertising may be successfully utilized, but, for the purposes of this discussion, those conditions that bring about an active, efficient marketplace (many sellers, significant demand, well-defined end item, low risk in performance) are most important in assuring the buyer of settling on a fair and reasonable price.

⁹Sherman, Procurement Management, p. 75.

2. Negotiation

Should the defense buyer encounter little or no price competition, a situation he can seldom affect in the short run, procurement via negotiation may serve to inject competition, in the form of technical or schedule considerations, into the marketplace or capitalize upon any measure of price competition that does exist. Lacking effective price competition for the end item sought, the buyer can rely upon the techniques of price negotiation, cost and/or price analysis, to guarantee the defense agency a fair and reasonable price:

Price negotiation is a technique used in the absence of effective price competition in order to reach a sound decision on price....[Its] objective obviously is a fair and reasonable price....¹⁰

Price analysis alone may be used on smaller or simpler negotiated procurements in the effort to negotiate a bottom-line price. It generally includes comparing the offeror's price with those offered by any competitors, with agreed-upon prices from prior or current procurements, with published prices or with prices developed by estimates or parametric relationships. In the greater majority of negotiated procurement scenarios, it is seldom sufficient. Effective price competition would have to exist before the reliable information needed could be obtained.

In the absence of a marketplace to set one, a fair and reasonable price can be determined using a "cost-plus theory"¹¹ of pricing. Though it is disputed in some circles, this theory holds that the cost of

¹⁰ASPM No. 1, p. 7A5.

¹¹Ibid, p. 2B15.

performance, plus a reasonable return on that cost as profit, will result in a price acceptable to both buyer and seller. Thus, emphasis must be placed on the costs incurred by the seller.

The buyer must then depend upon cost analysis, in addition to his use of price analysis, in establishing his pricing objective:

Contract cost analysis is used to establish the basis for negotiation of contract prices where price competition is adequate or lacking altogether and where price analysis, by itself, does not assure the reasonableness of price.

Costs are analyzed to determine if the total cost estimate approximates the dollars it should cost to perform the contract if the₁₂ company operates with reasonable economy and efficiency.

Though the Government negotiator seldom seeks agreement with the seller on the levels of cost, particularly by cost element, that will be (prospective pricing) or have been (retroactive pricing) incurred in his effort to establish a fair and reasonable price, he must make use of contract audit techniques in order to evaluate the cost data submitted by the seller.

C. THE NATURE OF COST ACCOUNTING

Generally, a solicitation that indicates the agency's intention, or requirement, to procure material via negotiation will necessitate a proposal, by cost elements, from interested offerors. Barring exceptions to the requirement for a detailed cost estimate, the seller must utilize a "cost-plus" method to price his offer. Government procurement regulations notwithstanding most rational entrepreneurs utilize the tools of cost accounting and maintain a cost accounting system.

¹²ASPM No. 1, p. 2B19.

Cost accounting involves the process of planning and accounting for, and controlling, the costs incurred in the daily operations of the firm. By means of budget forecasts and actual cost tracking, management is capable of applying unexpired costs against revenues in order to determine profit. Professor Gordon Shillinglaw offers:

Cost represents the resources that have been or must be sacrificed to obtain a particular objective.

Cost accounting, then, deals with the measurement of resource sacrifices.¹³

He further defines cost accounting as follows:

[It is]...the body of concepts, methods and procedures used to measure, analyze and estimate the costs, profitability and performance of individual products, departments and other segments of a company's operations, for either internal or external use or both, and to report on these questions to the interested parties.¹⁴

"Product costing" is directed toward utilizing an accounting system, the system of organization and procedures utilized by the firm to collect, record and report accounting data, in order to track the costs incurred in the manufacture of end product units, from commencement, through shops and processes, to completion:

The second major objective of the accounting system is product costing for purposes of inventory valuation and income determination. This product-costing purpose means that departmental costs must be applied to the physical units which pass through the departments.¹⁵

By means of product costing, the profitability of various product lines can be assessed and important managerial decisions made by

¹³Gordon Shillinglaw, Cost Accounting: Analysis and Control, Rev. Ed., (Homewood, IL: Richard D. Irwin: 1967), p. 11.

¹⁴Ibid, p. 12.

¹⁵Charles T. Horngren, Cost Accounting: A Managerial Emphasis, Second Edition, (Englewood Cliffs, NJ: Prentice-Hall, Inc: 1967) p. 69.

the firm. The results of these decisions can then be translated into the detailed cost proposals demanded by the Government buyer. Cost proposals submitted are then subjected to rigorous contract audit to allow the procurement agency to establish pricing objectives, conduct price negotiations and reach a sound pricing arrangement with the seller:

The terms "audit review" and "audit" refer to examinations by contract auditors of contractors' statements of costs to be incurred (cost estimates) or statements of costs actually incurred to the extent deemed appropriate by the auditors in the light of their experience with the contractors and relying upon their appraisals of the effectiveness of the contractors' policies, procedures, controls and practices. Such audit reviews or audits may consist of desk reviews, test checks on a limited number of transactions, or examinations in depth at the discretion of the auditors.¹⁶

The buyer of defense material thus utilizes an output of the seller's cost accounting system in order to assist him in agreeing upon a fair and reasonable price.

D. GOVERNMENT REGULATIONS TO SIMULATE MARKETPLACE FACTORS

It has been established thus far that, in the absence of price competition, the negotiation methodology is best suited to the defense procurement agency's responsibility of arriving at a price that is fair and reasonable to both buyer and seller. The negotiation environment, a mutual give and take scenario characterized by the buyer's offers and the seller's counteroffers, in defense procurement has been artificially altered through the passage of legislation that serves to simulate the workings of effective competition:

¹⁶Department of Defense, Defense Contract Audit Agency, Contract Audit Manual, DCAAM 7640.1, May 1979 Edition (hereinafter, "DCAM"), para. 3-101(a).

Most authorities believe that a degree of regulation is necessary; to substitute for natural forces inherent in the open marketplace, to alert the seller to special rights reserved by the Government as a buyer, and to identify the needs of the Government in its role as sovereign.¹⁷

The first of what the Commission on Government Procurement referred to as "...good and valid reasons..."¹⁸ led to two significant statutes passed in an effort to bring the Government buyer on par with the seller of defense material.

1. Truth in Negotiations

Public Law 87-653, the Hebert amendment to the Armed Services Procurement Act of 1947, was enacted by Congress on 10 September 1962 and is commonly referred to as the Truth in Negotiations Act. Applicable to the Department of Defense, Coast Guard and National Aeronautics and Space Administration, it requires a prime contractor or subcontractor to submit cost or pricing data under certain circumstances in support of his detailed cost proposal and certify, to the best of his knowledge and belief, that the data is accurate, current and complete as of the date of final agreement on price. The requirement to submit and certify cost or pricing data is levied upon every prime contractor and subcontractor (at every tier) who enter a negotiated contract or contract modification in excess of \$100,000. Contracts whose prices are set by law or regulation, as a result of catalog or market prices, or through the benefit of adequate price competition are exempted from the P.L. 87-653 provisions. Additionally, the requirements may be waived for appropriate reasons by the head of the procuring agency.

¹⁷COGP Final Report, Part 1, V. 2, p. IX-23.

¹⁸Ibid.

After certification, the law provides that the contract price may be adjusted downward if the data submitted by the contractor, and relied upon when the agreement on price was reached, is found to be defective. A subsequent amendment to the Truth in Negotiations Act¹⁹ provides that Defense Contract Audit Agency auditors are permitted to examine the firm's books and records for the purpose of determining if the data submitted is inaccurate, incomplete or noncurrent and thereby susceptible to defective pricing.

The Truth in Negotiations Act bestows upon defense buyers the right to review the historical data accumulated or budget projections utilized by the contractor in product costing. The law diminishes the leverage the contractor is able to exert in the absence of price competition. By means of contract audit and the price adjustment penalty for defective pricing, a movement toward equal footing for both parties in the negotiation process was initiated with its passage:

In general, these data requirements attempt to give the Government buyer an ability to analyze the relationship between cost and price, and to attack in negotiations the validity of price by attacking elements of cost. Their importance lies in aiding negotiations when competition on a price basis does not constitute a major factor in selection for award. By setting these requirements, the Congress acted to prescribe affirmatively the nature of the negotiations process associated with federal procurement.²⁰

The requirement to justify cost proposals allows the negotiation process to bring artificially-created forces, that simulate those of the price competitive marketplace, to bear upon the defense contractor.

¹⁹Public Law 90-512 of 25 September 1968.

²⁰Sherman, Procurement Management, p. 104.

2. Cost Accounting Standards

In and of itself, however, the Truth in Negotiations Act did not completely give the parties equal footing in the negotiation arena. Even with the law's requirement that contractors fully support and justify their product costing to the defense procurement agency, certify that such data submitted is current, accurate and complete, and be held liable for the facts and judgments presented until three years had elapsed after the date of final payment for performance, contractors had considerable opportunity to inconsistently apply or manipulate the manner in which the cost or pricing data were estimated, accumulated or reported.

During the 1968 and 1970 hearings, Congress expressed a general dissatisfaction with the evidence presented them of the lack of rigidity in cost accounting for negotiated Government contracts. In the majority of cases, where contract price was based upon product costing estimates, it was argued that a uniform cost accounting system was vital, since reimbursement to the contractor from taxpayers' monies was the logical result of the cost proposal. The Defense Acquisition Regulations offered some general guidelines in the form of Section XV Cost Principles, but directed contracting officers to generally-accepted accounting principles on the complex issues of product costing: measurement of costs incurred, assignment of costs measured to cost accounting periods, allocation of assigned costs to final cost objectives, and consistent application of the practices chosen. Generally-accepted accounting principles, however, were harshly dismissed during the debates. They were referred to as "accounting fantasies"²¹ that were never intended to resolve the difficulties of

²¹U.S. Congress, Senate, 26 June 1968, Congressional Record, p. 18848.

Government contract costing. By allowing considerable discretion in the manner in which contractors accounted for costs, they provided for neither uniformity or consistency. The Comptroller General questioned the Defense Department's reliance on the principles in testimony, noting their inappropriateness.

Congress was witness to testimonies of "the elastic nature of cost accounting"²² and accusations that some contractors, in their application of the most convenient of the diverse methods of accounting available, were "bigamists when monogamy [was] needed."²³ Without a way to bring "common meaning to [the] technical words."²⁴ of defense contract costing, there was simply "no way of determining precise costs."²⁵

Standing alone, the Truth in Negotiations Act only required justification of cost estimates via verifiable cost or pricing data:

...consist[ing] of all facts which reasonably can be expected to contribute to sound estimates of future costs as well as the validity of costs already incurred.²⁶

The accounting procedures utilized in ascertaining these facts were not prescribed and consistent maintenance of these procedures throughout performance was, in effect, not controlled. Congressional attention had

²²U.S. Congress, Senate, 9 July 1970, Congressional Record, p. 23454.

²³U.S. Congress, Senate, 26 June 1968, Congressional Record, p. 18848.

²⁴U.S. Congress, Senate, 9 July 1970, Congressional Record, p. 23454.

²⁵U.S. Congress, House, 4 June 1968, Congressional Record, p. 15886.

²⁶DAR, para. 3-807.1(a)(1).

been gained by charging defense contractors with profiteering, but the real issue was the inability of Public Law 87-653 to completely simulate the marketplace forces that guarantee a fair and reasonable price when price competition exists:

Profit is only part of the real income to a company...large additional profits on defense work can be hidden as costs just by the way overhead is charged...how company parts are...[costed], or how intra-company profits are handled....Thus, profit statistics are meaningless unless measured in accordance with a uniform standard....[T]he Truth in Negotiations Act...[is] based on the presumption that the Government can readily determine supplier costs. The Government can't.²⁷

By enacting Public Law 91-379, commonly referred to as the Cost Accounting Standards Act, as a companion to Public Law 87-653, artificial factors to substitute for the forces of price competition are in place. The defense contractor is required to establish and justify his price through the presentation of auditable, factual data, consistently estimated and accumulated through uniform accounting practices. In the course of the negotiation, the contracting officer has access to most of the salient books and records utilized by the contractor to develop the proposal and is protected by the statutory prohibition against defective pricing and affirmation of accounting uniformity and consistency. The parties to the process are essentially equal and the course of the negotiation will be determined by their inherent bargaining strengths.

a. Efforts of the CASB and DOD

A thorough history of the activities of the Cost Accounting Standards Board (CASB), the implementation of the Board's output by the Department of Defense (DOD) and the administrative efforts of both agencies

²⁷ Admiral Hyman Rickover, as cited in U.S. Congress, House, 4 June 1968, Congressional Record, p. 15886.

to cope with the statute and interpret applicable rulings is not the purpose of this study. Other research,²⁸ collections and unofficial guidance of private reporting services,²⁹ publications of industry associations³⁰ and countless articles are available to the interested reader. Certain aspects are, however, appropriate to briefly introduce at this point in the development of the background and perspective of the research.

(1) CASB Rules, Regulations and Standards. The first promulgations of the Board were published in the Federal Register on 29 February 1972. In addition to its first two Cost Accounting Standards, CAS 401, "Consistency in Estimating, Accumulating and Reporting Costs," and CAS 402, "Consistency in Allocating Costs Incurred For the Same Purpose," Rules and Regulations were issued that govern: applicability to, and exemption and waiver from, the Standards; the disclosure of practices; contractual provisions for CAS-susceptible contracts; and a body of unique definitions for accounting terms the Board would use in its pronouncements. As of this writing, 16 additional Standards have become effective, one more is in the proposal stage and two interpretations to previously-issued

²⁸For example, David V. Lamm, "The Administration of Cost Accounting Standards," (Doctoral Dissertation, The George Washington University, 1976).

²⁹Procurement Associates, Inc. includes a summary of CASB history and rulings in Government Contracts Service (Covina, Ca: Paul R. MacDonald, 1973) and has developed a thorough procedural publication entitled Cost Accounting Standards (Covina, Ca: Paul R. MacDonald, 1976). Commerce Clearing House publishes the Cost Accounting Standards Guide (Washington, DC: Bureau of National Affairs, Inc., 1973), easily the most complete, authoritative and up-to-date reference work available.

³⁰For example, A Compendium of Cost Accounting Standards' Impact Upon the Procurement Process, Aerospace Industries Association, Inc., August 1979, et al.

Standards have been published. The promulgation of a Cost Accounting Standard, from initial research to final proposed rule, is a long and arduous process characterized by several opportunities for public comment, that inevitably leads to significant revisions, and Congressional consideration. The Board has issued an average of two CAS for each year of its existence. Occasionally, a new Standard has forced larger defense contractors to significantly amend their accounting practices and procedures. Industry complaints of continuing turbulence in the cost accounting field has led one influential member of the Defense Department to call for "...the end of the administratively disruptive need for extensive cost accounting revisions required by the promulgation of new Standards."³¹

(2) DOD Implementation of CAS. Within a few months of the initial CASB promulgations, the Defense Acquisition Regulatory Committee issued Defense Procurement Circular (DPC) Number 99, dated 4 May 1972. The Circular created four new contract administration functions, four new contract audit responsibilities, two new DAR sections (3-1200, containing implementation procedures, and Appendix 0, to serve as a repository for CASB-issued Rules, Regulations and Standards), and adopted the solicitation notice, certification and CAS Contract Clause mandated by the Board, in addition to some changes necessitated to Part XV Cost Principles.

The creation of the CASB brought on a flurry of activity within the Defense Department: the Defense Contract Administration Service (DCAS) created an ad hoc group of project officers at headquarters level to resolve procedural and interpretive problems and the Defense Contract Audit Agency (DCAA) developed a Cost Accounting Standards branch of their existing Special Projects Division. Meanwhile, the DAR Committee

³¹Dale Church, Deputy Under Secretary of Defense (Acquisition Policy), in a letter to CASB Chairman Elmer Staats, 9 March 1979.

formed a CASB Rules and Regulations Subcommittee to consider changes to DAR necessitated by experience.³²

By the end of 1975, DOD had taken much more extensive implementation action. Both DCAS and DCAA had created "CAS networks" in the field, staffed by highly-competent accountants and auditors, that had direct access to headquarters and could offer assistance and guidance on-site when problems arose. Training seminars were conducted regionally via a traveling "road show" of experts. The DAR Committee issued, as DPC 74-5, dated 4 March 1975, an additional clause, "Administration of Cost Accounting Standards," and clarified the issue of contract price adjustments that were specified in the CAS Clause issued by the Board. Finally, a two-week training course on CAS was developed for DOD personnel at the Army Logistics Management Center, Ft. Lee, Virginia.

Despite these extensive efforts, the implementation and monitoring of Cost Accounting Standards by DOD has proven to be an ongoing, monumental task.

(3) The DOD CAS Working Group. In 1976, DOD established a CAS Steering Committee, whose purpose was to develop interim procedures and policy guidance useful to integrating CAS promulgations into procurement practices. The Working Group, made up of representatives of policy offices of the services, DCAS and DCAA, carries out the detailed work of the Committee. The intent of the Working Group is to provide quick response by high-level policy officials to problems and questions surfaced in the field.

³²David V. Lamm, "The Administration of Cost Accounting Standards" (Doctoral Dissertation, The George Washington University, 1976), pp.62-64.

To date, the Working Group has published 24 papers on a variety of CAS-related issues. The guidance contained therein, however, is advisory only, not binding upon Administrative Contracting Officers.

E. THE RELATIONSHIP OF CAS TO THE PROCUREMENT PROCESS

The argument thus far in this Chapter of the research study was aptly summarized in a report by Professor William J. Vatter, University of California (Berkeley), commissioned by the Comptroller General:

When prices are established under something less than fully competitive conditions and the restraints of the market operate imperfectly---as in the case of most Government contracts---cost data must play a large role in contract negotiation and settlement. Under such conditions, the method of cost accounting can make a substantial difference in results,³³ and variations in cost assignments may become a matter for concern.³³

The creation of a Cost Accounting Standards Board, and the Standards it would subsequently issue, with the full force and effect of law, were intended to be the appropriate response to this concern. An exploration of the relationship of Cost Accounting Standards to the defense procurement process, as a reaction to the primacy of cost data in the imperfect marketplace, will be beneficial to the continuing development of the research perspective.

1. The Process of Procurement By Negotiation

The negotiated procurement cycle was described by the Commission on Government Procurement in an extensive, three-year study initiated by Congress:

The procurement process includes all actions taken by the Federal agencies in obtaining goods and services. The process begins with identification of a need and ends with delivery...³⁴

³³William J. Vatter, "Standards for Cost Analysis," found as Appendix IV, p. 490, to Comptroller General, "Feasibility of CAS."

³⁴Report of the Commission of Government Procurement, (Washington, DC: Government Printing Office, 1972) Vol. 1, p. 2.

The process has seven phases, each of which is briefly described below:

a. Identification of Need and Funding

In this, the initiation of the process, a need is recognized and a product or service conceptualized to fill that need. After funding has been obtained, a procurement request is transmitted to the relevant agency.

b. Procurement Planning

At the cognizant buying office, a number of preliminary steps are taken in the effort to translate the procurement request into a solicitation document and plan the course of the procurement. The solicitation may be drawn up in the rough and circulated as a draft; the market can then be tested by response to this document; the breadth of solicitation and competition is studied; and a milestone chart to track significant events is constructed.

c. Solicitation

This document, an advertisement for offers, is promulgated as a request for proposals or a request for quotations and disseminated as widely as practicable to take advantage of any measure of competition that exists.

d. Selection

In negotiated procurement, the field of offerors, respondents to the solicitation, is narrowed to a competitive range of those that have a reasonable opportunity of award.

e. Negotiation

In this step, the proposals of all offerors in the competitive range are evaluated via cost and price analysis and on the basis of management

or technical criteria. Discussions with all offerors may be held and a "best and final offer" requested from each.

f. Award

The execution of the contract itself binds both Government and the contractor chosen to performance.

g. Contract Administration

This final step may be the most important. Performance is monitored until completion to ensure that the terms and conditions of the contract are carried out.

Many minor variants of the process are possible, however, in those procurements subject to the Truth in Negotiations Act and the Cost Accounting Standards Act, or just the latter alone, three steps, selection, negotiation and contract administration, always have at the center of their execution the consideration of the contractor's detailed cost proposal.

Selection of the offerors to form the competitive range is based upon, among other criteria, the estimate of performance costs contained within their proposals.

The negotiation process begins with consideration of the contractor's proposal as the initial offer and the proposal forms the basis from which the Government buyer determines a negotiation objective.

Among the functions of the contract administration office is the surveillance of costs incurred, utilizing the agreed-upon price as a benchmark.

In 1970, when the CASB was given its charge to:

...promulgate cost-accounting standards to achieve uniformity and consistency in the cost-accounting practices followed by defense contractors and subcontractors under Federal contracts.³⁵

these phases of the procurement process, and the treatment of cost data therein, would be affected most.

2. CAS Affects on the Selection and Negotiation Phases

The CASB has recognized uniformity as a prime objective:

Uniformity relates to comparison of two or more accounting entities and the Board's objective in this respect is to achieve comparability of results of entities operating under like circumstances.³⁶

During the pre-award phases, involving selection and negotiation, Congress intended that the promulgation of Cost Accounting Standards would require a contractor, contemplating the treatment of cost data, to execute this treatment identical to the manner required of another CAS-susceptible contractor in a similar situation. Assurance of this uniformity among contractors increases comparability of different proposals, aiding the selection process:

In the absence of "uniform principles," the entire burden is placed upon procurement officials to evaluate the contractor's accounting practices without the guidance of authoritative support for the use of alternatives in specific circumstances and thus results in more work for auditors and procurement officials, delays in important technical work, and excessive procurement costs.³⁷

Insistence upon uniformity guarantees the "common meaning to technical terms" sought and establishes a common base of understanding, from which the negotiation process can more efficiently proceed:

³⁵U.S. Congress, House, 10 August 1970, Congressional Record, p. 28098.

³⁶CASB, "Restatement of Objectives, Policies and Concepts, May 1977, p. 1.

³⁷Comptroller General, "Feasibility of CAS," p. 2.

Properly administered cost-accounting standards...do much to promote a common understanding as to the methods of cost determination to be used ...under specific circumstances and thereby minimize subsequent controversy...³⁸

As the Board's first Executive Secretary remarked, the purpose of CAS "...is to narrow the options in cost accounting that...[were]...available"³⁹ in an effort to bring comparability and uniformity to Government contract costing.

3. CAS Affects on The Contract Administration Phase

The CASB recognized that consistency in contract costing after award was another worthwhile goal to pursue:

Essentially, consistency relates to the allocation of costs, both direct and indirect, and to the treatment of costs with respect to individual cost objectives as well as among cost objectives in like circumstances.⁴⁰

During the Comptroller General's Feasibility Study, examples of the inconsistent treatment of costs were discovered repeatedly: contractors were inconsistent in their identification of costs as direct or indirect; contractors allocated indirect cost pools in the manner most beneficial and convenient to the recovery of costs; and some contractors frequently were guilty of "double-counting," treating the same cost both directly and indirectly. Requiring, monitoring and enforcing consistency in Government contract costing insures that the negotiation pricing assumptions made by the Government, and based upon the contractor's statement of estimated costs, continue to remain sound throughout the life of the contract. By

³⁸Ibid, pp. 12-13.

³⁹Arthur Schoenhaut, "Attitudes Toward Cost Accounting Standards," The GAO Review, Winter 1973, p. 41.

⁴⁰CASB, "Restatement of Objectives," March 1977, p. 2.

means of its earliest Standards issued, the CASB has mandated that the practices through which the contractor develops cost and pricing data to support his proposal also be utilized in product costing, the accumulation and reporting of his costs. In its requirement for disclosure of those practices, the Board has established visibility in contract costing and enabled the contract administrator and auditor to monitor contractor compliance with the consistency dictum. It is in the post-award environment that Cost Accounting Standards clearly respond to many of the concerns expressed, including the "profiteering" and "gaming" charges levied against some defense contractors, during the 1968 and 1970 Congressional hearings.

F. CAS IN THE POST-AWARD ENVIRONMENT

It is after the agreement upon price between the contractor and the Government, post-award, that the mandates contained within the Rules, Regulations and Standards of the CASB are strongest. Pre-award, the Government requires only that the contractor's disclosure of his cost accounting practices be adequate and that his proposal and the Disclosure Statement be in compliance with Cost Accounting Standards. Once the contract is executed and performance begins, however, Government surveillance and scrutiny of the contractor's accounting practices and procedures intensifies. The rigor with which this audit takes place can be seen as a response to three needs present in a procurement environment lacking price competition: a stabilization of prices and funding levels and a prohibition against the manipulation of accounting practices.

1. The Pricing Stabilization Need

During negotiation, the Government buyer relies upon the contractor's disclosure of cost accounting practices, the practices the contractor

has utilized in the past (his "established" practices) and the mandates of uniformity that are Cost Accounting Standards in order to develop assumptions upon which he can base a pricing objective. This objective is thus reached via a common understanding of the costing methods the contractor will utilize to trace or assign costs to the final end product. From these assumptions, profit, incentive and limitation of costs or funds constraints evolve, each designed to motivate the contractor to, and reward him for, successful performance.

If the pricing assumptions, however, fail to materialize in fact, the pricing formula utilized to reach a negotiated settlement may be invalid and incapable of promoting and fostering the profit-maximizing orientation of the contractor in the manner intended. Through its consistency and uniformity requirements, the CASB has responded to the need for stabilizing the pricing assumptions developed during the course of negotiation, thereby maintaining through contract completion the cost, profit and incentive structure established at award.

2. The Anti-Manipulation Need

In the 1968 and 1970 hearings, debate in the Banking Committees, as well as on the floor of both Houses, was characterized by charges that defense contractors were profiteering through manipulations of their accounting practices. Though the accusations tended to exaggerate the scope and range of this illicit activity, it was certainly true that sufficient opportunity and motivation existed for unscrupulous contractors to practice "gaming" in product costing.

The ability to manipulate the measurement, assignment and allocation of costs incurred to end products carries with it the opportunity to

shift costs from commercial to Government work and from fixed-price to cost-reimbursable work. Without continual scrutiny, advance agreements or a common understanding and compliance with the rules of cost allowability, contractors were capable of directing the movement of costs to their own advantage. Indeed, costs legitimately incurred could be illegitimately reimbursed by more than one customer, providing the motivation of increased profits. Though regulations contained within DAR XV and the conventions of generally-accepted accounting principles essentially proscribed this activity, enforcement was lax and compliance was uneven.

The statutory prohibition of the payment of "increased costs" by the United States contained within Public Law 91-379, and repeated in the Cost Accounting Standards Contract Clause, responds to the need to deter, if not eliminate, the manipulation of accounting practices in post-award. The opportunity for unpenalized duplicity and deceit in product costing is eliminated by the application of cost accounting practices that are consistent with those established pre-award and uniform with those mandated by CAS.

3. The Funding Level Stabilization Need

In some situations, the Rules and Regulations of Cost Accounting Standards permit adjustments to final contract price to correct a material shift in costs between contracts. This provision allows funding levels to be stabilized within programs and enables the Administrative Contracting Officer to amend the effects of a deviation in cost accounting practices that otherwise might reduce the price of one contract at the expense of another, with no change in the level of effort expended.

G. THE DYNAMICS OF THE CONTRACTOR'S ACCOUNTING SYSTEM

1. Changes in Accounting Practices

It is clear from the 1970 Hearings in the Senate that a prohibition of all changes to cost accounting practices was never intended to be the result of P.L. 91-379. The Comptroller General offered this argument in testimony:

Yes, there can be legitimate reasons for contractors to vary their accounting practices over any period of a given contract and it will be necessary to recognize these reasons in any attempt to gain consistency....Whether the contractor or the Government is entitled to a favorable price change in the circumstances cited would depend on the type of contractual instrument and other considerations involved in the particular circumstances.⁴¹

Yet some measure of the resistance in Congress over the establishment of the Cost Accounting Standards Board was forged on the fear that the proposed agency would restrict contractors from making legitimate changes in addition to those legitimately prohibited. A review of the range of potential changes to a contractor's accounting system would be beneficial to the discussion.

Cost accounting practice changes in the CAS environment can be grouped into four categories:

a. Mandatory changes are those made to an accounting system to comply with the requirements of a Cost Accounting Standard and to which the Government's representative agrees represent a proper, and necessary, implementation of the Standard;

b. Discretionary changes are those proposed and voluntarily effected by the contractor for his own benefit:

⁴¹Hearings before the Subcommittee on Production and Stabilization of the Senate Committee on Banking and Currency, 91st Congress, 2nd Session, March 1970, pp. 141-142.

c. Sanctioned changes are those proposed by either party to the contract, agreed to be beneficial by both parties, and accepted and effected by the contractor with the blessings of the Government;

d. Noncompliant changes are those effected by the contractor to which the Government objects and charges the contractor with inconsistency or a lack of uniformity.

The above range of options is available to contractors susceptible to Cost Accounting Standards and the responsibilities of the parties in the face of each category of potential change are detailed in the Cost Accounting Standards Contract Clause and the Administration of Cost Accounting Standards Clause. Thus, the occurrence of, or necessity of, changes to a contractor's cost accounting practices is accepted as central to the post-award administration of covered contracts.

2. The Need to Assess Cost Impact

Attendant with the recognition that changes to a contractor's practices may occur is the Government's obligation to prohibit increased costs in some situations, discretionary or noncompliant changes, and to provide for equitable adjustment for the cost shifts in others, mandatory or sanctioned changes. In the face of these obligations, the monetary effect, or cost impact, of the shift in costs caused by a change to cost accounting practices, for whatever reason, must be traced. This assessment allows contract price adjustments, upward and downward, or downward only, to be made to the contract and enables the Government to maintain pricing assumptions throughout performance, prohibit the payment of increased costs and stabilize contract funding levels, thus responding to the needs

recognized in the post-award environment. Given the potential for changes, the assessment of cost impact is a major and vital activity during contract administration.

H. SUMMARY

It was the intention of this Chapter to provide a brief history, and discuss the significance of Cost Accounting Standards in order that a perspective, through which the research study could be properly viewed, would be established.

Given the nature of the marketplace in which the majority of defense procurement dollars are expended, the benefits of market forces, absent when price competition is not present, can only be attained through Government regulations. The most significant of these regulations that serve to simulate the price competitive marketplace, and equalize the footing enjoyed by buyer and seller, evolved from the Truth in Negotiation and Cost Accounting Standards Acts.

The two companion laws provide the Government buyer with product costing information, established through the seller's cost accounting system. The contractor's cost accounting options are circumscribed by contractual requirements of veracity in the submission of cost or pricing data and consistency and uniformity in its production or treatment. Public Laws 87-653 and 91-379 enable the Government to require and rely upon the data produced by the contractor's cost accounting system in its attempts to reach a fair and reasonable price.

Through these regulations, the Government is assured that cost proposals submitted in response to the solicitation are essentially uniform, and thus

comparable. Additionally, the contractor is charged with consistently applying his cost accounting practices, made visible through disclosure, throughout the period of performance. This responsibility insures stabilization of negotiation pricing assumptions and contract funding levels. Additionally, it serves to implement the Congressional prohibition against the payment of increased costs.

Despite these regulations, changes to cost accounting practices can and do occur after award. In view of this undeniable fact, and in order to respond to the needs Congress recognized in negotiated procurement when it established the CASB, the shift in costs between contracts caused by the change must be measured. This process, the assessment of cost impact, is the continuing responsibility of the Administrative Contracting Officer throughout performance and, with contract audit, the action most significant to the effectiveness of Cost Accounting Standards in the post-award environment.

III. THE ASSESSMENT OF COST IMPACT: THE CURRENT PROCESS

The purpose of the previous Chapter was to explore the history and significance of Cost Accounting Standards as they relate to the defense procurement process. As a result of that presentation, a perspective has been developed through which the need to assess the cost impact of a cost accounting practice change can be seen to be a cornerstone of the administration of Cost Accounting Standards and an essential response to the defects recognized in the negotiated defense procurement marketplace.

This Chapter describes the regulatory and conceptual environment that currently surrounds and defines the cost impact assessment process. The contractual obligations of the Cost Accounting Standards covered contractor, as mandated by the Board's Cost Accounting Standards Contract Clause and DOD's Administration of Cost Accounting Standards Clause, will be discussed. From this discussion, a model of the administration of Cost Accounting Standards, that incorporates the salient requirements binding each party, will be presented. DOD guidance available to Government players in the process, and cost impact measurement techniques currently in use, will also be identified.

A. THE ADMINISTRATION OF COST ACCOUNTING STANDARDS

David V. Lamm, as a conclusion to the most extensive research work published to date on the affects of CAS on the DOD procurement process, wrote: "Cost Accounting Standards administration is extremely complex, rigid and confusing."¹ In the five years that have passed since the publication of Lamm's dissertation, both DOD and the CASB have had the opportunity and inclination to refine and improve the rules and regulations that govern the workings of CAS in the post-award environment. Since the assessment of cost impact and resultant contract price adjustment actions are the major responsibility of the Administrative Contracting Officer (ACO) during CAS administration, it is appropriate to briefly review the post-award aspects of Cost Accounting Standards administration.

1. The CAS Contract Clause

Part 331, "Contract Coverage," of the CASB's Rules and Regulations has been subject to continuing amendment since 1972. It covers the applicability of the Cost Accounting Standards to defense contracts, including exemption and waiver from the Standards, and dictates the notice, requiring disclosure of cost accounting practices, to be included in the solicitation of any negotiated defense contract expected to exceed \$100,000. Central to this discussion is Part 331.50 of the Contract Coverage provisions, the Cost Accounting

¹David V. Lamm, "Administration of CAS," p. 305.

Standards Contract Clause (Appendix A), hereinafter referred to as the "CAS Contract Clause." This Clause, identical to that incorporated into DAR,² requires a contractor, as a condition of contracting, to:

- (i) disclose his cost accounting practices in writing;
- (ii) follow consistently his disclosed and "established" (i.e., where disclosure is not required) practices in accumulating and reporting contract performance costs;
- (iii) apply changes to his disclosed and established practices to the contract prospectively;
- (iv) comply with all Standards in effect on the date of award or date of final agreement on price, as appropriate;
- (v) comply prospectively with any Standard which becomes applicable to the contract after award and agree to an equitable adjustment, under the Changes Clause of the contract, if the contract cost is affected;
- (vi) negotiate with the contracting officer to determine the terms and conditions under which a change to disclosed or established practices may be made;
- (vii) agree to an adjustment in contract price if he fails to comply with any applicable Standard or his disclosed or established practices and increased costs accrue;

²DAR 7-104.83(a).

- (viii) utilize the Disputes Clause of the contract as a remedy for any failure to agree on whether he has complied;
- (ix) permit audit of his books or records by appropriate officials to resolve any question related to compliance; and
- (x) flow down the substance of the Clause to any applicable subcontract.

The balance of Part 331 and the working of the CAS Contract Clause, which together express conceptually the rights and obligations of each party to the contract, can best be explained through a sequential discussion of their provisions.

a. Changes to Cost Accounting Practices

Until February 1977, the CASB had not published a definition of the terms "cost accounting practice" or "change to cost accounting practice." As a result, considerable confusion existed in the field, among both contract administrators and members of affected industry, over implementation and administration of the Board's Rules governing changes to cost accounting practices (CAP's). At its first evaluation conference in July 1975, industry participants were especially critical of both the Board's failure to clearly define its prohibitions and the actions of Government personnel attempting to enforce compliance despite the confusion.

The 1977 proposed rule, which became effective 10 March 1978, offers the following definition of a cost accounting practice:

...any accounting method or technique which is used for measurement of cost, assignment of cost to cost accounting periods, or allocation of cost to final cost objectives.

(1) Measurement of cost encompasses accounting methods and techniques used in defining the components of cost, determining the basis for cost measurement and establishing criteria for use of alternative cost measurement techniques....

(2) Assignment of cost to cost accounting periods refers to a method or technique used in determining the amount of cost to be assigned to individual cost accounting periods....
/Including/...requirements for the use of specified accrual basis accounting or cash basis accounting for a cost element.

(3) Allocation of cost to cost objectives includes accounting methods or techniques used to accumulate cost, to determine whether a cost is to be directly or indirectly allocated, to determine the composition of cost pools, and to determine the selection and composition of the appropriate allocation base.³

A change to a disclosed or established cost accounting practice has been defined in the amendment as:

...any alteration in a cost accounting practice, whether or not such practices are covered by a Disclosure Statement...⁴

The Board made provision for several exceptions to this definition. The following situations are not considered cost accounting practice changes:

- (i) the initial adoption of a cost accounting practice;
- (ii) the partial or total elimination of a cost; and
- (iii) the revision of a CAP for a cost previously considered immaterial.

Additionally, the Board has provided examples in Part 331.20(j)

³
⁴ CFR 331.20(h).

⁴ CFR 331.20(i).

of accounting practice change scenarios to illustrate the definitions.

These clarifications of the Board's mandates are central to the proper administration of CAS. The letter and spirit of the statute was aptly cited in a 1977 Air Force Contract Management Division letter to all AFPRO's (Air Force Plant Representative Offices) and Corporate ACO's:

The GAO Feasibility Study is permeated with examples where alterations in the contractor's measurement or allocation of costs resulted in an inequitable amount of costs being charged against Government contracts...[It] was just this type of activity that P.L. 91-379 was designed to prevent.⁵

With the publication of definitions of cost accounting practices and changes to cost accounting practice, the CASB has communicated its understanding of the "alterations" that GAO had discovered and to which Congress had responded with legislation. A common meaning has thus been established.

b. Sources of the CAP Change

Discovery of a deviation, or identification of an alteration, in disclosed or established cost accounting practices inevitably leads to investigation of the source, or reason, for the change. Determination of the source governs the treatment, accorded by the Government and described by the CAS Contract Clause, of the shift in costs caused by the change. Four scenarios of potential change sources exist, however, only two alternate treatments of a material shift in costs

⁵As cited in A Compendium of Cost Accounting Standards' Impact Upon the Procurement Process, Aerospace Industries Association of America, Inc., August 1979, p. 9.

are possible: mandatory changes, required by the issuance of new Cost Accounting Standards, and sanctioned voluntary changes give rise to equitable adjustment; discretionary voluntary changes and noncompliant changes may result in downward adjustment only if a material shift in costs accrues.

(1) New Cost Accounting Standards. When the Board's initial drafts of Rules and Regulations were published for review, many respondents argued that, over the course of performance, cost accounting practices would have to be modified on existing contracts as new Standards were promulgated. Accordingly, the CASB provided that newly-published Standards would be applied prospectively to any existing contracts:

Further, the Board has been persuaded by the strong arguments from industry commentators that companies with more than one contract, subject to different Cost Accounting Standards, cannot maintain multiple records to account for each contract related to its set of standards....[The] vast majority of companies must apply any required cost accounting practices across their total business, and... it would be impractical if not impossible for companies to apply different practices to different contracts. The Board has accommodated this view by enabling contractors to apply uniform practices to different contracts.⁶

Thus the CAS Contract Clause makes the following requirements of the contractor:

...The contractor shall also comply with any Cost Accounting Standard which hereafter becomes applicable to a contract or subcontract....prospectively from the date of applicability...

⁶ General Comments prefacing publication of 4 CFR 331, 37 F.R. 4139, 29 February 1972.

⁷ 4 CFR 331.50.

When a new Standard is published, two dates are mandated to define implementation. The effective date of the Standard defines those contracts eligible for either upward or downward price adjustment. All open contracts in existence on the effective date are considered. The applicability date is that date subsequent to the effective date when the provisions of the Standards, the change in CAP's mandated, must be implemented. Any contract awarded after the effective date must be priced, at award, with the foreknowledge that compliance with the new provisions is required on the applicability date. Generally, the applicability date is triggered by receipt of a covered contract. Most Standards have provided that a contractor must implement the new provisions at the beginning of the next fiscal year following the award of the first covered contract after the effective date.

CAP changes necessitated by the issuance of new Standards are considered mandatory changes and give rise to equitable adjustment to the prices of covered contracts in existence prior to the effective date of the Standard.

(2) Voluntary Changes. Prior to March 1978, all changes to CAP's that were proposed by the contractor, proposed by the Government and accepted by the contractor, or required by the passage of legislation, the issuance of regulations, or the advisory promulgations of professional organizations (e.g., the Financial Accounting Standards Board), other than those necessitated by a new Cost Accounting Standard,

were considered "voluntary." The CASB interpreted Public Law 91-379 such that increased costs arising as a result of voluntary changes were prohibited. Since this interpretation restricted organization and accounting changes that had traditionally been the prerogative of corporate management as well as changes required by law or regulation, e.g., the Employee Retirement Income Security Act of 1974, (unless the contractor was prepared to allow his contract prices to be unilaterally adjusted downward only for any material shift in costs caused by the change) a controversy developed that dominated the first five years of the Board's existence. On 10 March 1978, however, the Board amended the CAS Contract Clause to recognize "desirable" changes.

A sanctioned change is one which leads to a beneficial effect, recognized by the Government, on the practices the contractor is using to estimate, accumulate and report costs. By definition, a sanctioned change cannot give rise to increased costs; the CAS Contract Clause authorizes either upward or downward adjustment:

When the parties agree to a change to either a disclosed cost accounting practice or an established cost accounting practice, other than a change under (4)(A) above [(new Standard), the parties shall]...negotiate an equitable adjustment as provided in the changes clause of this contract.⁸

⁸ 4 CFR 331.50.

The Contract Clause provisions provide that the ACO shall make the determination to sanction a voluntary change:

Prior to the utilization of the provisions of subparagraph (a)(4)(C) of the contract clause set out in Part 331.50, the contracting officer shall make a finding that the change is desirable and is not detrimental to the interests of the Government.⁹

The DOD CAS Working Group has offered the following guidance to ACO's to assist them in making the desirability determination:

The term "desirable" encompasses the tests of being warranted, appropriate, equitable, fair or reasonable. The contracting officer's finding shall not be made solely because of the financial impact on the contractor's current CAS-covered contracts. A change may be desirable and not detrimental to the interest of the Government even though costs increase.¹⁰

Thus the Board has provided for upward or downward adjustment in contract prices for two sources of CAP changes that give rise to a material shift in cost: mandatory and sanctioned changes. This upward or downward, or equitable, adjustment has been defined by the Court of Claims as "simply a corrective measure utilized to keep the contractor whole."¹¹ The Clause recognizes the Government's obligation, in mandating or sanctioning a change to CAP's, to adjust the contract price after the change to a level such that the contractor will be in a position neither better nor worse than he occupied before

⁹ 4 CFR 331.51.

¹⁰ DOD CAS Working Group Item 79-23 of 2 January 1979.

¹¹ As cited by Frederick Neuman, "Government Equitable Contract Price Adjustments," Contract Management, September 1979, p. 19.

the change. In the second category of voluntary changes, discretionary changes, however, the CAS Contract Clause provides for downward adjustment only of covered contract prices.

Discretionary changes may arise when the contractor implements an alteration in CAP's that fails the desirability determination of the ACO. Later modifications to cost accounting practices in contracts awarded after the effective date, but before the applicability date, of a new Standard that fail to apply prospectively the mandatory provisions of the CAS before award will also generally be considered discretionary when the changes are implemented. Changes proposed and implemented in response to a new Standard that are judged to exceed its requirements will be classified discretionary. In each of the latter two cases, however, the changes will be subjected to the potential benefits of the desirability determination.

(3) Noncompliance. The final source of CAP changes are those discovered and determined to be noncompliant. CAS noncompliance determinations can arise as a result of three potential accounting failures of the contractor either during the proposal or performance stages of the contract:

- (i) a failure to comply with disclosed CAP's;
- (ii) a failure to comply with established CAP's; or
- (iii) a failure to comply with the provisions of a Cost Accounting Standard.

In addition to the routine cost estimating, accumulating and reporting noncompliance scenarios occurring prior to, or during, the contract, the contractor's proposals to alter practices to implement new Standards or effect voluntary changes can also lead to a contracting officer's judgment of non-compliance. Provisions of the Clause are identical to the wording contained within the legislation in requiring the contractor to:

Agree to an adjustment of the contract price or cost allowance, as appropriate, if he or a subcontractor fails to comply with an applicable Cost Accounting Standard or to follow any practice disclosed...and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon ...from the time the payment by the United States was made to the time the adjustment is effected.¹²

Other than the determination of compliance itself, the striking difference between voluntary changes and noncompliant changes is the contractor's proposal, or revelation, of the voluntary change in advance of its implementation. The similarity among those voluntary changes classified discretionary and noncompliant changes is the provisions of the Contract Clause that prohibit increased costs as a result of discretionary changes:

[The contractor shall] negotiate with the contracting officer to determine the terms and conditions under which a change may be made to either a disclosed cost accounting practice or an established cost accounting

¹²4 CFR 331.50.

practice....Provided, that no agreement may be made under this provision that will increase costs paid by the United States.¹³

c. Increased Costs

Several concepts were introduced in Part 331 that are important to an understanding of the implications of the CAS Contract Clause. P.L. 91-379 clearly prohibits "increased costs paid to the defense contractor by the United States." In its application of the prohibition to discretionary and noncompliant changes, the Board defines the term in Part 331.70, "Interpretation:"

(a) Increased costs paid by the United States...shall be deemed to have resulted whenever the cost paid by the Government results from the application of practices other than the contractor's disclosed practices or from failure to comply with applicable Cost Accounting Standards, and such cost is higher than it would have been had the disclosed practices been followed and applicable Cost Accounting Standards complied with.

A simple scenario will illustrate the definition. A contractor with a flexibly-priced covered contract (i.e., not fixed-price) and a fixed-price commercial contract could increase his cost recovery by manipulating, via noncompliance or a voluntary change, his disclosed practices after negotiation of price to shift the allocation of some portion of the costs from the commercial contract to the Government contract:

	<u>Original Negotiated Cost</u>	<u>Allocation Shift</u>	<u>Costs Allocated to the Contract</u>
Gov't CPFF	250,000	+10,000	260,000
Comm FFP	100,000	-10,000	90,000

. ¹³ Ibid .

Prior to the advent of CAS, an unscrupulous contractor could collect \$260,000 from the Government and \$100,000, the contract fixed-price, from his commercial customer. 4 CFR 331.70(a) defines this situation as "increased costs" of \$10,000 and the Contract Clause authorizes the ACO to reduce the price of the Government contract by this amount to \$250,000.

The previous definition, however, is not appropriate for covered fixed-price contracts:

In negotiated firm fixed-price contracts, however, "increased costs" cannot be interpreted in terms of a higher level of costs reimbursed during contract performance, since in such contracts the price to be paid would normally be the price agreed to. That price will have to be based on the requirement that the contractor use his disclosed practices and comply with applicable Cost Accounting Standards. Subsequently, if the contractor fails during contract performance to follow his disclosed practices or to comply with applicable Cost Accounting Standards, any increased cost to the United States by reason of that failure must be measured by the difference between the cost estimates used in negotiations and the cost estimates that would have been used had the contractor proposed on the basis of the practices actually used during contract performance.¹⁴

A scenario similar to the earlier portrayed situation will serve to illustrate increased costs in a firm fixed-price contract:

	<u>Original Negotiated Cost</u>	<u>Allocation Shift</u>	<u>Costs Allocated to the Contract</u>
Gov't FFP	250,000	-10,000	240,000
Comm CPFF	100,000	+10,000	110,000

¹⁴ 4 CFR 331.70(b).

Here, the CAS stipulations prevent the contractor from unscrupulously recovering \$250,000 from the Government, the negotiated fixed-price, and \$110,000 from his commercial customer. Upon discovery, the ACO will reduce the price of the covered contract by \$10,000, to \$240,000.

In summary, therefore, increased costs on a flexibly priced contract are defined to be the difference between the higher level of costs allocated to the contract, through noncompliance or a discretionary change, and the lower level that would have been allocated had no change in CAP's taken place. In a fixed-price contract, however, increased costs come about as a result of the lower level of costs allocated to the contract by the noncompliance or discretionary change.

d. Offsets

In order to be consistent with existing contract principles, the "offset" concept from the regulations covering defective pricing was utilized by the CASB, but the Board extended the notion to allow offsets between contracts. As a result of the offset provision, increased costs occurring as a result of noncompliant or discretionary changes to one covered contract may be applied to decreased costs allocated to another contract:

In one circumstance an adjustment to the contract price or of cost allowances...may not be required when an amendment to disclosed or established practices is estimated to result in increased costs being paid....This circumstance may arise when a contractor is performing two or more contracts, subject to Cost Accounting Standards Board rules, regulations and standards....The amendment may increase the cost paid under one or more of the contracts, while decreasing the cost paid under one or more of the contracts. In such case, the Government will not...require price adjustment for any

increased costs paid...so long as the costs decreased under one or more contracts are at least equal to the increased cost under the other affected contracts...¹⁵

If a noncompliance is judged inadvertent, a similar offset is allowed.¹⁶ An illustration of the simplest cases, where two covered contracts comprise the entire "universe" of contracts for the contractor, will be beneficial to the discussion:

		<u>Original Negotiated Cost</u>	<u>Allocation Shift</u>	<u>Costs Allocated to the Contract</u>
(1)	Gov't CPFF	250,000	-10,000	240,000
	Gov't CPFF	100,000	+10,000	110,000
(2)	Gov't FFP	250,000	-10,000	240,000
	Gov't CPFF	100,000	+10,000	110,000
(3)	Gov't FFP	250,000	-10,000	240,000
	Gov't FFP	100,000	+10,000	110,000

In example (1), the effect of the higher level of costs allocated to the first CPFF contract is exactly equal to the lower level of costs allocated to the second CPFF contract. The ACO has the option of authorizing payment of the costs allocated to the contracts, or, by disallowing the additional \$10,000 on the second contract, encouraging the contractor to revert to his old practices. In either case, the Government would only pay the total of \$350,000, and the contractor would recognize no windfall profits. In example (2), the change in CAP's results in increased costs for both the fixed-price and the flexibly-priced contracts. Part 331 provides, however:

¹⁵ 4 CFR 331.70(f).

¹⁶ 4 CFR 331.70(g).

(In cases where an offset of decreased costs allocated to firm fixed-price contracts against increased costs allocated to cost reimbursement type contracts may be involved, the provisions of subparagraph (f) [the offset provision] hereof shall apply.)¹⁷

Lamm explains:

The CAS Board is saying in its interpretations that where the situation presented in...[example (2)]...exists, the definition of increased costs on FFP contracts is "suspended" and, in fact, such costs are not "increased costs" but rather "decreased costs" for the purpose of the offsets.¹⁸

In example (2), a positive action is required by the ACO in order to achieve the offsetting adjustment. Either the FFP contract should be unilaterally lowered to \$240,000, or \$10,000 in costs should be disallowed on the CPFF contract, to prevent increased costs from occurring. In example (3), the ACO again has the option of adjusting the prices of both contracts or leaving them at their fixed-price levels, without the risk of violating the prohibition.

The offset rule is permissive; the ACO is encouraged, but not required, to offset increased costs against decreased costs to minimize price adjustments to covered contracts. In their training course entitled "Advanced Cost Accounting Standards," DCAA recognizes the distinction:

It should be noted that application of the offset principle is not mandatory. The CAS rules and regulations permit

¹⁷ 4 CFR 331.70(b)

¹⁸ David V. Lamm, "The Administration of CAS," p. 116.

offsets "provided that the contractor and all affected contracting officers agree on the method by which the price adjustments are to be made for all affected contracts."¹⁹

The restriction of the utilization of the offset rule on deliberate noncompliance is not permissive, however. The DOD CAS Working Group offers ACO's guidance to assist them in making the distinction between inadvertent and deliberate noncompliance. Deliberate noncompliance should be determined if the contractor has not made a reasonable effort to introduce appropriate personnel to CAS requirements, if repeated noncompliances of the same nature are discovered, if a contractor makes a clearly frivolous appeal of an ACO determination, or if a contractor takes no action to correct or dispute a noncompliance recognized.²⁰

Only a brief introduction of the offset principle and mechanism has been attempted here. Further discussion, that includes extensive examples of offset scenarios, can be found in the "Administration of Cost Accounting Standards" by David V. Lamm and in Cost Accounting Standards, published by Procurement Associates, Inc.

e. Materiality

Materiality is an accounting principle providing guidance on the relative significance of a cost or accounting

¹⁹Defense Contract Audit Agency, "Cost Impact Proposals and Contract Price Adjustments," Advanced Cost Accounting Standards, undated, p. 2.

²⁰DOD CAS Working Group Item 77-12 of 29 March 1977.

method or technique. Generally, materiality criteria set out judgmental, or quantitative, yardsticks through which the decision-maker can assess the influence a cost or treatment may have on an accounting measurement.

The CASB has provided both general materiality statements, applicable to the body of Rules, Regulations and Standards promulgated, and specific materiality statements of significance, peculiar to one ruling. In general, these criteria recognize that the

...Board believes that the administration of its rules, regulations and Cost Accounting Standards should be reasonable and not seek to deal with insignificant amounts of costs.²¹

The materiality of a cost allocation shift caused by a change in CAP's is therefore always a consideration in the ACO's decision to adjust contract prices. The following criteria are considered by the Board to be useful guidelines in any materiality determination of CAS issues:

- (i) the absolute dollar amount involved;
- (ii) the amount of the total contract cost compared with the amount under consideration;
- (iii) the relationship between a cost item and a cost objective;

²¹ CASB Statement of Operating Policies, Procedures and Objectives, 6 March 1973.

- (iv) the impact upon Government funding;
- (v) the relationship of the cost in question to contract price; and
- (vi) the cumulative effect of individually immaterial items.²²

The determination that a shift in costs is immaterial is not irrevocable, however, and is generally accompanied by a caveat warning the contractor that the issue could potentially lead to a contract price adjustment if, in the future, the amount of costs becomes material.

2. DOD Implementation of the CAS Contract Clause

The conceptual post-award obligations of the parties are specified in the CAS Contract Clause. This Clause, however, is silent as to each party's procedural requirements during Cost Accounting Standards administration. These requirements are contained within the Administration of Cost Accounting Standards Clause²³ (hereinafter, the "CAS Administration Clause").

a. The CAS Administration Clause

The CAS Administration Clause (Appendix B) is the result of DOD efforts to translate the conceptual provisions of the CAS Contract Clause penned by the Board into brief

²²Ibid.

²³DAR 7-104.83(b).

procedural obligations made of the contractor necessary to administer covered contracts. The Clause prescribes the guidelines to be followed by the contractor in the course of proposing changes to his cost accounting practices.

A covered contractor is required to submit a two-stage proposal to the administrative contracting officer for approval whenever a change is proposed or made necessary by a noncompliance determination. The initial stage of the proposal shall provide a complete description of the accounting practice change and a gross estimate, or statement of "general dollar magnitude," of the allocation shifts caused by the change:

[The contractor shall] Submit to the cognizant Contracting Officer a description of the accounting change and the general dollar magnitude of the change to reflect the sum of all increases and the sum of all decreases for all contracts containing the Cost Accounting Standards Clause (7-104.83(a)).²⁴

The CAS Administration Clause requires the submission to be made within 60 days of the applicability date in the case of changes necessitated by new Standards, within 60 days of the implementation date for voluntary changes and within 60 days "after the date of agreement" of both parties to a noncompliance determination. The Clause allows "a mutually agreed to date" to be substituted for the 60-day time constraints.

²⁴DAR 7-104.83(b).

After the contractor's proposal has been determined adequate and compliant, the final stage of the change proposal shall be submitted within 60 days, or a mutually-acceptable period. The Clause stipulates only that the contractor "...[s]ubmit a cost impact proposal in the form and manner specified by the cognizant Contracting Officer..." and agree to any appropriate contract price adjustments as required by the CAS Contract Clause.

Finally, the CAS Administration Clause requires contractors who flow down both Clauses to subcontractors to report the following information to their ACO within 30 days of the award of a covered subcontract: subcontractor's name and number, dollar amount and date of award and

...a statement as to whether the subcontractor has made or proposes to make any previously unreported changes to accounting practices that affect other CAS covered prime or subcontracts. If award of the subcontract requires the subcontractors to comply with a Standard for the first time, this also shall be reported.²⁵

b. Duties of the Principal Government Players

A brief discussion of the roles and duties assumed by Government actors in the administration of Cost Accounting Standards will be beneficial to this Chapter's description of the current regulatory environment.

²⁵Defense Logistics Agency, Contract Administration Manual for Contract Administration Services, DLAM 8105.1 (hereinafter, "DLAM"), January 1979, paragraph 3-1200.14a(4).

(1) The Procuring Contracting Officer. Cost Accounting Standards administration is not limited to actions after contract award. The Procuring Contracting Officer (PCO) is responsible for including the appropriate notice in the contract solicitation and for securing the offeror's Disclosure Statement of cost accounting practices, if applicable. Unless the PCO makes a written determination waiving the contractor's pre-award submission, the Disclosure Statement is forwarded to the cognizant ACO for a determination of adequacy. This review is essential to the conduct of the procurement process:

Award of a contract shall not be made until a determination has been made by the cognizant ACO that a Disclosure Statement is adequate unless, in order to protect the interests of the Government, the PCO waives this requirement. In this event, a determination shall be made as soon after award as possible.²⁶

The PCO is additionally responsible for taking action on any "preaward noncompliance" discovered during the contract auditor's initial compliance review of the contractor's proposal. In response to the ACO's initial finding of noncompliance, the PCO must negotiate a proposal reduction with the offeror, reaching agreement with the contractor to delete the costs associated with the noncompliance. The PCO must cite the disposition of the noncompliance issue in a post negotiation memorandum and provide a copy to the ACO, advising the latter of the resolution.

²⁶DAR 3-1203(b).

(2) The Administrative Contracting Officer. The duties of the ACO, as the central Government representative in all CAS administration activity, are extensive. He is responsible for:

- (i) determining the adequacy of the contractor's Disclosure Statement;
- (ii) reviewing and determining compliance of the Disclosure Statement with CASB mandates;
- (iii) reviewing and approving CAP change proposals and any amendments to the Disclosure Statement necessitated thereby;
- (iv) determining proposal and performance compliance with the Disclosure Statement and CAS; and
- (v) negotiating the impact of accounting changes, and executing subsequent supplemental agreements to modify the contract for any changes to CAP's.²⁷

(3) The Contract Auditor. Both DCAM and DAR are specific in their citations of the duties of the contract auditor as the principal advisor to the ACO on CAS administration. The contract auditor shall provide recommendations on:

- (i) the adequacy of the contractor's Disclosure Statement;

²⁷DLAM 3-1200.24a.

- (ii) the Disclosure Statement's compliance with applicable Standards;
- (iii) the contractor's proposal and performance compliance with CAS and disclosed or established CAP's; and
- (iv) the adequacy, compliance and reasonableness of contractor proposals for changes to disclosed or established CAP's.²⁸

(4) The Price Analyst. Until the most recent change to the DLAM,²⁹ the price analyst was assigned no specific duties in regard to the administration of CAS. DAR presently makes no requirements of this member of the field pricing team other than as the financial services element liaison between the ACO and the DCAA auditor. In the specific role the Defense Logistics Agency (Defense Contract Administration Services) has now assigned him, however, the price analyst is responsible for reviewing Disclosure Statements, "for use in performing proposal review and evaluations,"³⁰ issuing pricing reports to support the ACO's adequacy and compliance determinations and for reviewing and evaluating cost impact proposals. The price analyst retains the audit liaison role, but is given the new charge to "Maintain thorough familiarity with the CASB's rules, regulations and Standards."

²⁸DCAM L-000.3(a).

²⁹Change 3, dated 10 April 1980.

³⁰DLAM 3-1200.4(b).

In his current duties, the responsibilities of the price analyst are very similar to those assigned the contract auditor.

(5) CAS Board of Review. DCAS Regional Commanders are responsible for establishing various contract management boards to review contractual actions contemplated, or performed, by the ACO. In addition to the examination and evaluation of the ACO's determinations regarding Contractor Purchasing System Reviews, Contractor Employee Compensation System Reviews, and settlements of contract terminations for convenience, the Board is required to review CAS actions that result in a contract price adjustment of \$100,000 or more, that are the subject of controversy with any field pricing team member, including the auditor, or on which the ACO desires advice and assistance. In CAS actions, the Board's recommendations are advisory only, not binding upon the ACO. Though the Board is only a vehicle through which the ACO's determination is ratified, there is significant opportunity to influence the ACO's decision through its mandatory mechanisms.

(6) Other Players. Both DCAA and DCAS, with their CAS monitors and CAS specialists, respectively, have created staff positions at regional headquarters to provide technical guidance to ACO's and auditors, conduct training as needed, maintain liaison with headquarters and monitor determinations of field personnel, in an effort to assure consistent

Governmental action in the administration of CAS. Here again, the CAS monitors and specialists are in a position to influence the conduct of CAS matters.

3. A Model of CAS Administration

To this point, the Chapter has reviewed the conceptual and procedural aspects of the CAS clauses and provided a brief overview of roles and responsibilities assumed by both contract parties in CAS administration. Utilizing a combination of the background established by the preceding discussion and reference to DAR coverage of the process,³¹ it is possible to model the salient features of Cost Accounting Standards administration.

An effort to graphically portray the CAS administration process can be presented via a line chart illustrating actions and decision points typical to the administration of a covered contract. Two basic scenarios must be presented: the discovery of a noncompliant change and the identification of a voluntary or mandatory change. It will be necessary to portray each scenario over several pages, the sequence of procedures and decisions moving left to right, unless otherwise indicated by arrows. The following abbreviations will be used:

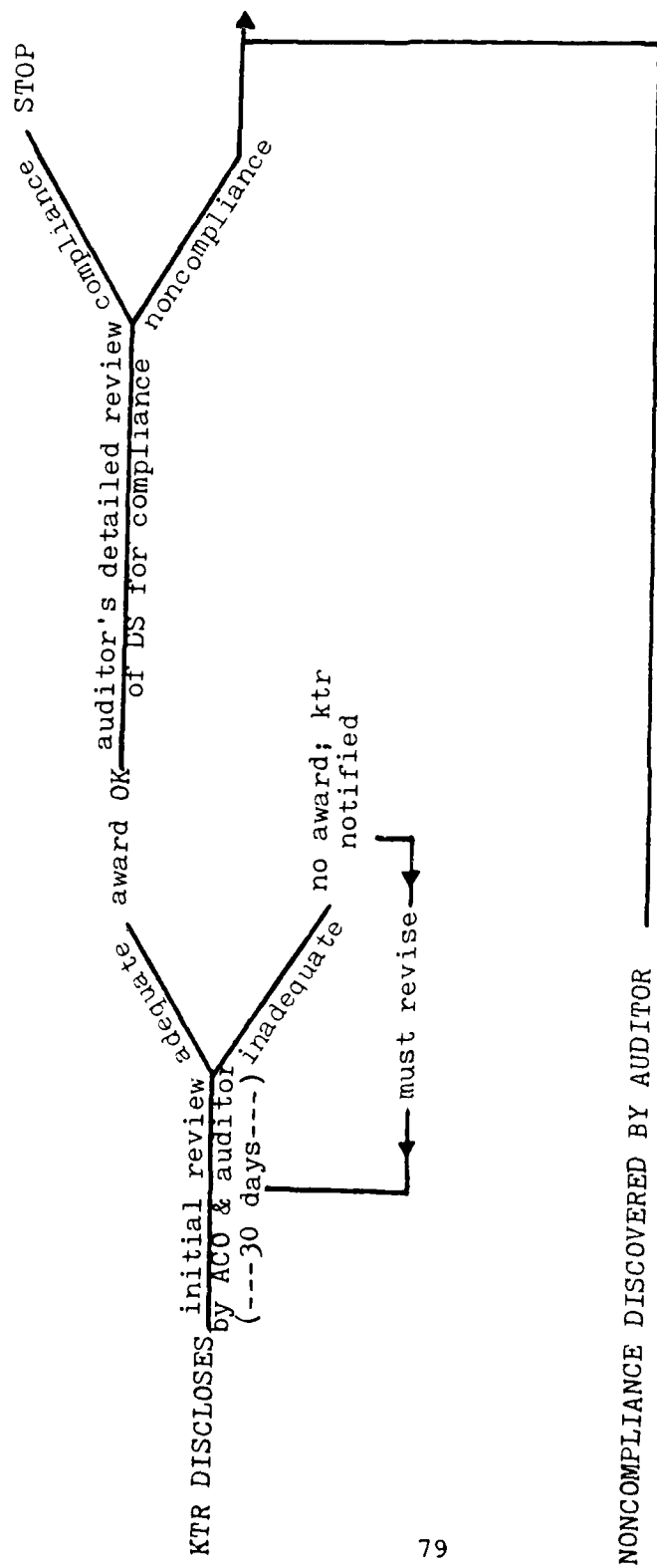
³¹DAR 3-1205 to 3-1214.

"KTR" or "ktr" for contractor; "KO" for contracting officer; "DS" for Disclosure Statement; and "CIP" for cost impact proposal.

Over the following four pages, the discovery or determination of noncompliance during proposal or performance is portrayed in Figure 3-1. As Figure 3-1(a) indicates, adequate disclosure of cost accounting practices is a condition of award. The ACO's determination of adequacy is based upon recommendations made by the contract auditor as to the currency, accuracy and completeness of the practices described within 30 days of receipt of the Disclosure Statement. If the offeror has submitted a Certificate of Monetary Exemption, certifying that the level of covered awards received during the preceding cost accounting period was \$10 million or less, thus exempting the contractor from disclosure, or a Certificate of Previously Submitted Disclosure Statement, the adequacy review is not necessary. Additionally, post-award submission or waiver of the Disclosure Statement may be authorized in certain circumstances.

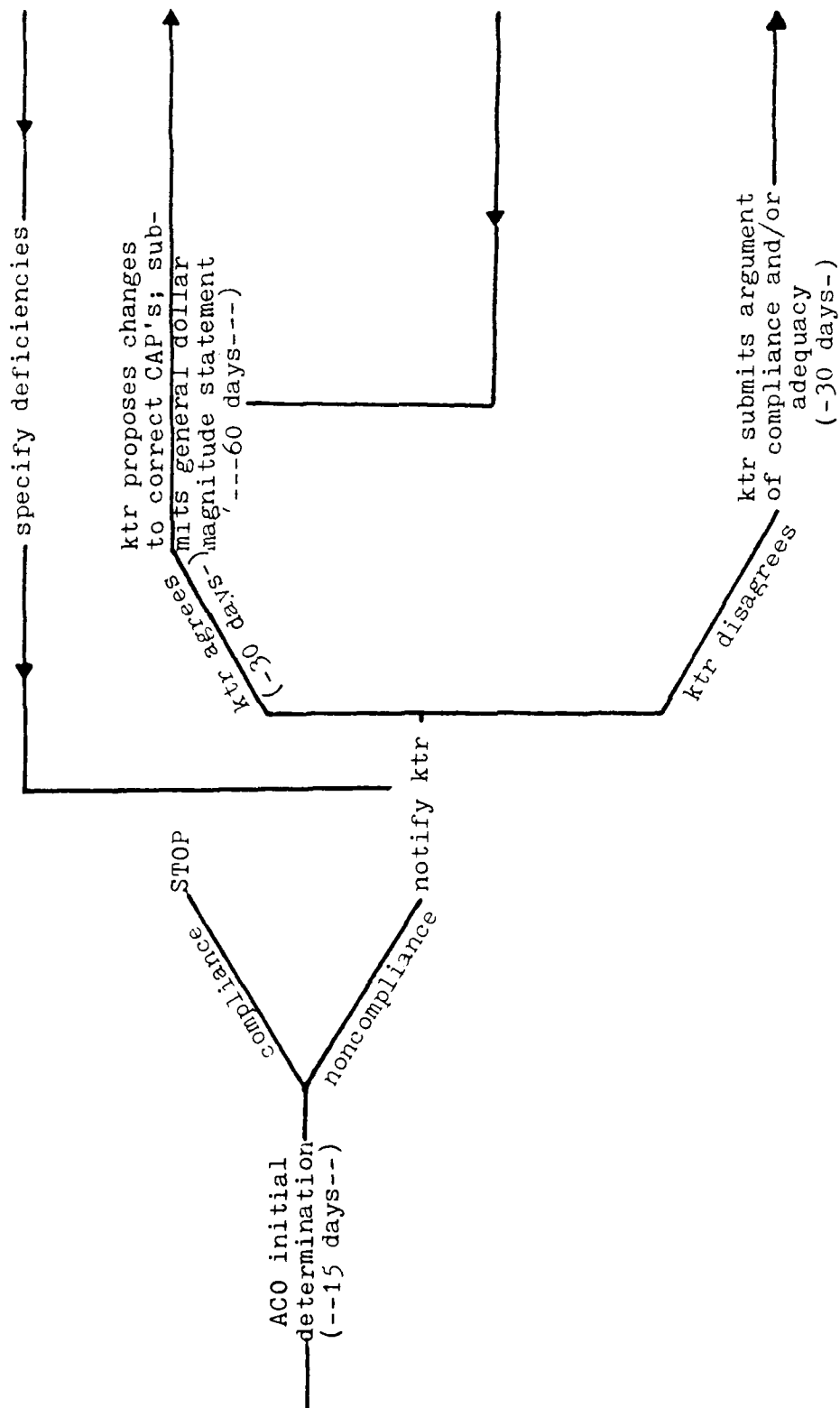
Noncompliance may be discovered during a post-award detailed review of the Disclosure Statement or, thereafter, at any point in contract performance. If it is alleged prior to award, the PCO will negotiate a reduction in the price

³²DAR 3-1203(d) and (e).



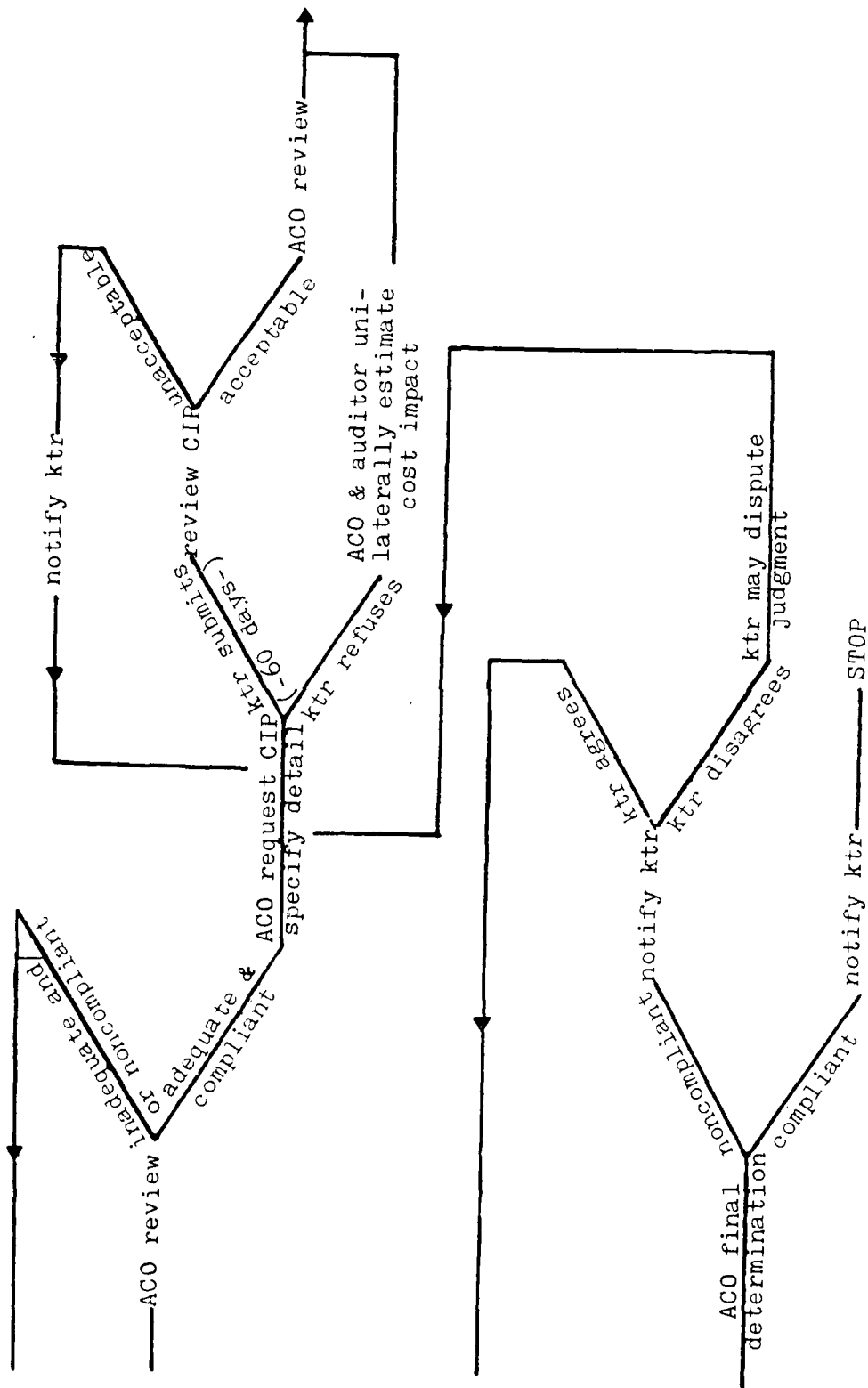
CAS NONCOMPLIANCE

FIGURE 3-1(a)



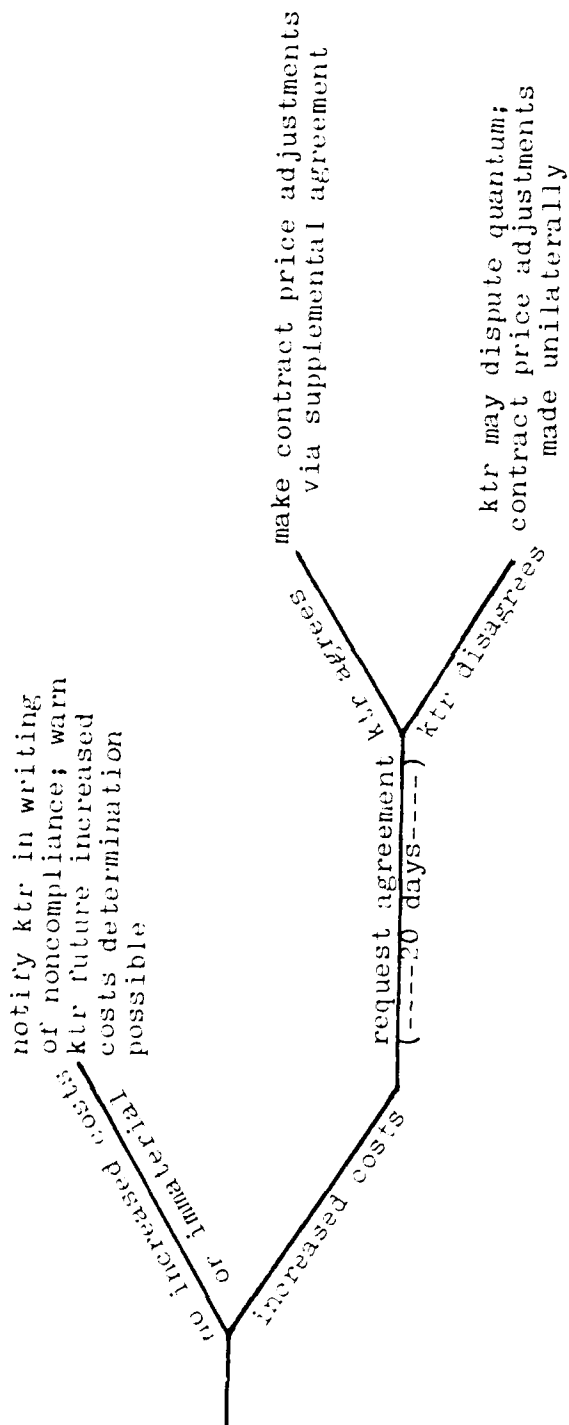
CAS NONCOMPLIANCE

FIGURE 3-1(b)



CAS NONCOMPLIANCE

FIGURE 3-1(c)



CAS NONCOMPLIANCE

FIGURE 3-1(d)

proposed to delete costs related to the noncompliant practice. Nonetheless, compliance is not a condition of award. If non-compliance is determined after award, Figure 3-1(b), the contractor is given 30 days to propose changes to his CAP's to bring them into compliance and submit a statement of general dollar magnitude of the change or to submit his argument for compliance if he disagrees with the ACO's finding. This argument is considered and a final determination, indicated on Figure 3-1(c), is rendered. The contractor has an opportunity to appeal the ACO's final determination of noncompliance under the contract's Disputes Clause.

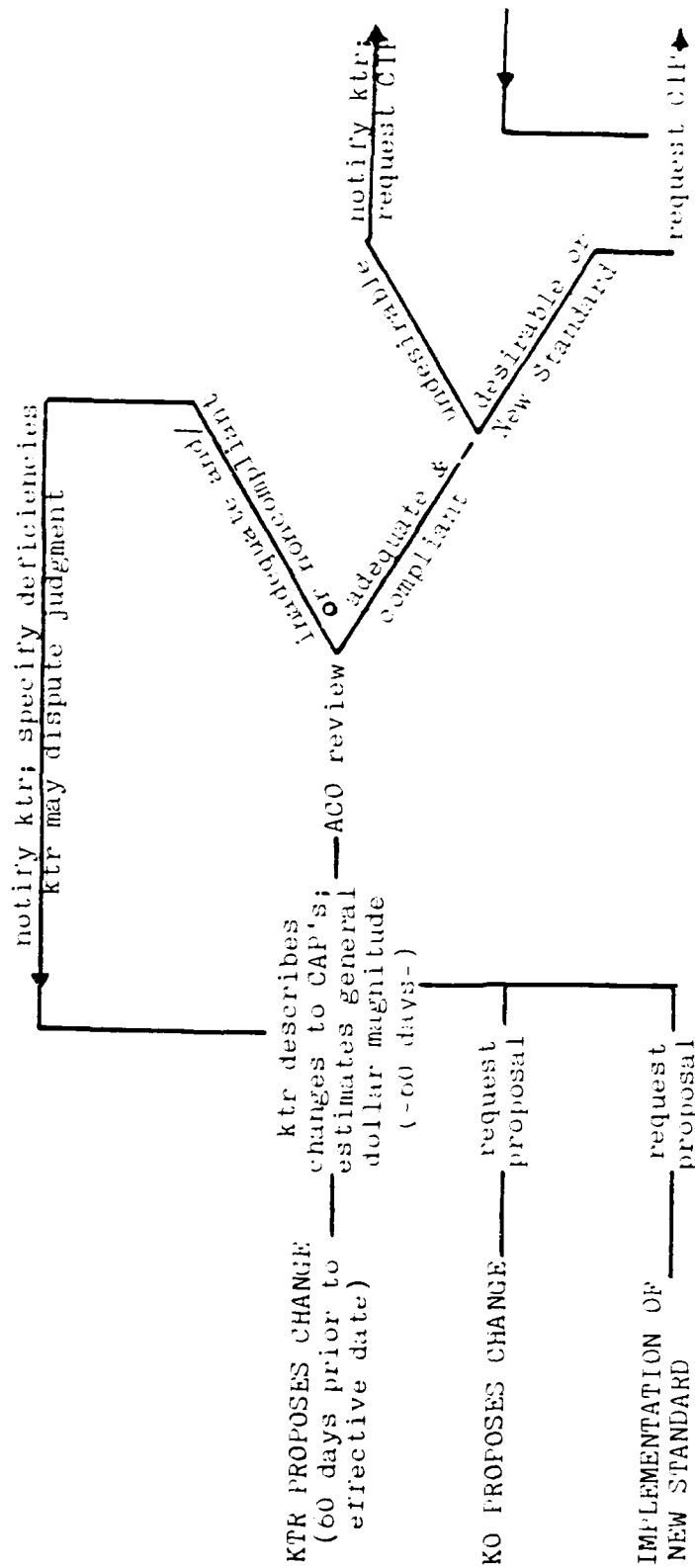
The contractor's submission of a description of the change necessary to alleviate the noncompliance is reviewed for both adequacy and compliance. If his proposal fails either test, the deficiencies are specified and an amended description is requested. If the description is both adequate and compliant, a cost impact proposal, "in the form and manner specified,"³³ shall be submitted by the contractor within 60 days. An identical requirement is made of the contractor who disputes the ACO's final determination of noncompliance. DAR 3-1212 provides that a cost impact proposal will be subjected to an acceptability determination by the ACO. If it is unacceptable, i.e., the format or detail required by the ACO

³³DAR 7-104.83(b).

has not been provided, it is returned to the contractor for correction. If the contractor fails to submit a proposal, the ACO and the auditor are required to assess the cost impact independently.

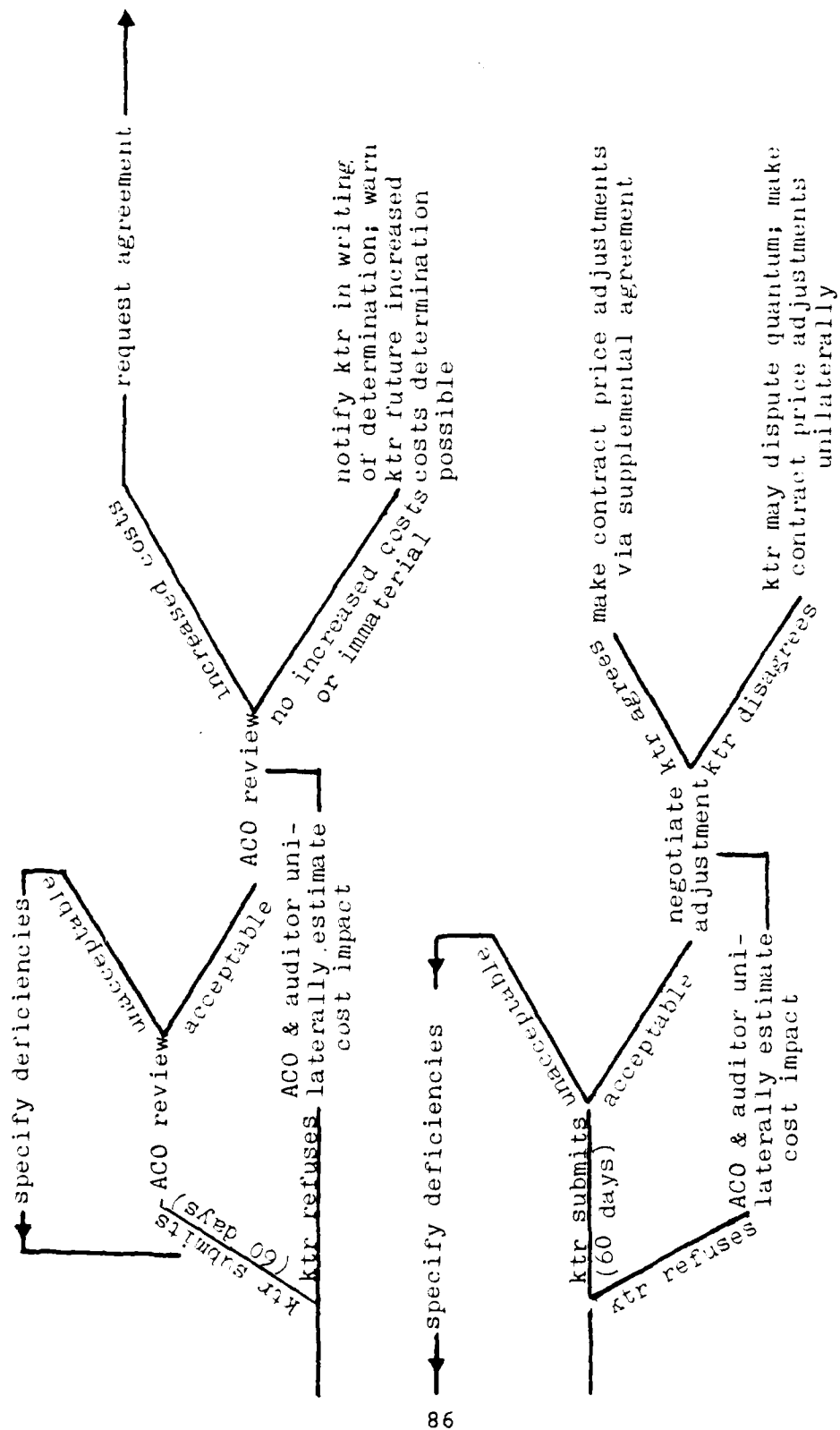
As a result of the information contained within the cost impact proposal, materiality and increased costs determinations can be made, as shown in Figure 3-1(d). If no increased costs have accrued to the Government as a result of the noncompliance, or if the level of the shift in costs is considered immaterial, the contractor is warned, in writing, that a future material shift causing increased costs may result in a contract price adjustment. If the level of increase in costs is material, however, the contractor is given 20 days to agree to the appropriate downward adjustment to contract price(s). If the contractor agrees, the price is modified by means of a supplemental agreement. Failure to reach agreement within the allotted time should be followed by a unilateral adjustment in contract price by the ACO. The amount of this adjustment is subject to the Disputes Clause.

Over the following three pages, the contractor's submission of a proposal to effect changes to his disclosed or established practices is presented as Figure 3-2. Figure 3-2(a), detailing voluntary changes and changes to implement new Standards, is similar to Figure 3-1(a). Each circumstance gives rise to the submission of a proposal to alter CAP's in



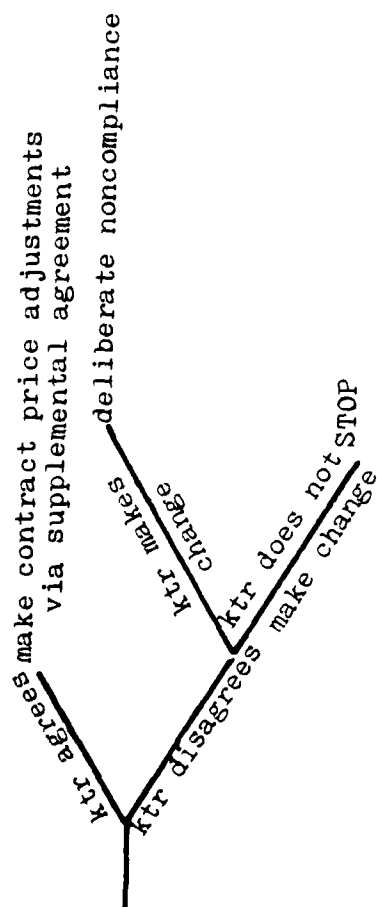
CAP CHANGES AND NEW STANDARDS

FIGURE 3-2(a)



CAP CHANGES AND NEW STANDARDS

FIGURE 3-2(b)



CAP CHANGES AND NEW STANDARDS

FIGURE 3-2(c)

advance of implementation. The contractor is again responsible for both an adequate description and a statement of general dollar magnitude of the shift in cost allocation. An ACO review for compliance and adequacy is performed and a subsequent determination of noncompliance may be appealed.

One important difference from the earlier diagrams of a noncompliant change scenario is the desirability determination made by the ACO in the case of voluntary changes. If the change is judged desirable, no subsequent determination of increased costs is necessary; the contractor is due an equitable adjustment. Informal liaison with a prominent member of the CASB staff reveals that the result of this determination is not subject to appeal. The CAS Contract Clause allows a sanctioned change only "if the parties agree...." The nature of the Government's disagreement is not a question of fact under the contract, therefore the right to sanction a change is exclusively retained by the ACO.

But for the split in procedures between mandatory or sanctioned changes and discretionary changes shown in Figure 3-2(b), the actions and decision points follow those presented in Figure 3-1. Figure 3-2(c) also illustrates one occasion that could result in a determination of deliberate noncompliance.

4. The Cost Impact Assessment Cycle

This discussion of the current CAS administration process may be concluded by summarizing the events of the

cost impact assessment cycle, and time constraints for those events dictated by DAR, in the schedule shown in Figure 3-3. The total time involved, from discovery or proposal of the alteration to final resolution of the allocation shift, is an optimistic estimate, however. The time constraints shown make no allowance for delays caused by disputes or repeated submittals of proposals forced by determinations of inadequacy or unacceptability. The process is further complicated and lengthened by the existence and necessary analysis of several, even hundreds, of covered contracts that may be, or have been, affected by the change.

B. DOD GUIDANCE ON THE COST IMPACT PROPOSAL

In the preceding description of the CAS Clauses, obligations of the contract parties and the administration process, it is evident that the measurement of the shift in costs caused by the accounting change is the central, and most important, responsibility of the ACO, as the primary Government representative in CAS matters. It is as a result of this cost impact assessment that the effects of CAP changes can be ascertained and necessary contract price adjustments determined. Ultimately, this leads to the maintenance of stable pre-award price assumptions and funding levels and the ability to correct any accounting manipulations aimed at enhancing cost recovery, the goals of CAS administration over the life of the contract. Given the significance of this task, the guidance and direction

THE COST IMPACT ASSESSMENT CYCLE

1. Initial Proposal By Contractor (60-90 days)
 - A. New Standard or Voluntary Change: Contractor submits proposal including a detailed description of the change and a statement of general dollar magnitude;
 - B. Noncompliance: Contractor is served with a notice of the ACO's initial finding, requiring him to submit a proposal for bringing his practices into compliance and a statement of general dollar magnitude, if he agrees, or the reasons he considers his present practices compliant if he does not agree.
2. ACO and Auditor Initial Review (30-60 days)
 - A. Contractor's submission is reviewed for adequacy and compliance. If the contractor has disagreed with the ACO's initial determination of noncompliance, the ACO reviews the contractor's submission and makes his final determination.
3. Contractor Preparation and Submission of CIP (60-90 days)
 - A. If the contractor submits a cost impact proposal, it is reviewed for acceptability, increased costs and materiality;
 - B. If the contractor refuses, the ACO and auditor assess cost impact.
4. ACO/Contractor Negotiation (30-60 days)
 - A. Agreement is required within 20 days. If agreement on increased costs and the extent of contract price adjustments can be reached, supplemental agreements are executed. If no agreement can be reached, contract prices are adjusted unilaterally by change order.

TOTAL TIME: 180 - 300 DAYS

FIGURE 3-3

provided the ACO and his principal CAS advisor, the contract auditor, on the cost impact proposal submission requirement that enables the assessment deserves exploration.

1. Guidance Available to the ACO

Several potential sources of guidance on the requirements of the two-stage impact assessment proposal are available to the administrative contracting officer in DAR, Working Group advisories and DLAM. A review of the emphasis given the proposal submission by each regulatory or advisory source follows.

a. Defense Acquisition Regulations

A DOD contract administrator faced with carrying out his obligations under the CAS Administration Clause would look to DAR, the massive compendium of agency procurement regulations and implementing authority for Executive or Legislative Department mandates, as a primary source of guidance and direction on the nature of the cost impact proposal (CIP) requirement. DAR Sections 3-1212, "Administration of Noncompliance Issues," 3-1213, "Administration of Equitable Adjustments for New Standards," and 3-1214, "Administration of Voluntary Changes," provide some elaboration on the two-stage proposal for cost impact assessment, the statement of general dollar magnitude and the subsequent CIP itself, specified in the CAS Administration Clause.

(1) The Statement of General Dollar Magnitude. There exists, within DAR, no further guidance on the nature of the statement of general dollar magnitude, the rough order estimate of the impact of an accounting practice change of any type, other than that available within the CAS Administration Clause:

Submit to the cognizant Contracting Officer...the general dollar magnitude of the change to reflect the sum of all increases and the sum of all decreases for all contracts containing the Cost Accounting Standards Clause...³⁴

Additionally, DAR makes no provision for a materiality determination by the ACO based solely on this gross summary of shifts of costs from or to the body of covered contracts. In each case, noncompliant, mandatory, sanctioned or discretionary changes to CAP's, the ACO is directed to obtain a CIP from the contractor, subsequent to this initial submission. In the case of a final determination of noncompliance, necessitated by the contractor's disagreement with the ACO's initial determination, the ACO is directed to pursue the cost impact proposal without requiring a statement of general dollar magnitude.

In summary, therefore, this first stage proposal serves only to indicate the net shift in costs to (increases) and from (decreases) the CAS universe of contracts from, or to, respectively, the contractor's uncovered contracts,

³⁴ DAR 7-104.83(b).

both Government and commercial. The impact assessment process must proceed to the second stage submission.

(2) The Cost Impact Proposal. This second stage proposal is therefore the determinant of the impact of allocation shifts caused by the change in CAP's. It is from the information contained within the CIP that the ACC can base a determination on equitable adjustment or increased costs, information necessary to make any appropriate adjustments in contract price.

For each type of change, DAR specifies only the minimum information required on the CIP. On noncompliant changes, this shall include:

- (i) identification of all contracts and subcontracts containing the Cost Accounting Standards clause; and
- (ii) the effect on each contract and subcontract from the date of failure to comply until the noncompliance is corrected.³⁵

On mandatory changes, the CIP must contain:

- (i) identification of each additional standard, together with contracts and subcontracts containing the Cost Accounting Standards clause having an award date prior to the effective date of such standard; and
- (ii) the effect on each contract and subcontract from the date the contractor is required to follow standard until completion of the contract or subcontract.³⁶

³⁵ DAR 3-1212(d).

³⁶ DAR 3-1213(c).

For both sanctioned and discretionary changes, the contractor shall submit a CIP detailing:

- (i) identification of all contracts and subcontracts containing the Cost Accounting Standards clause; and
- (ii) the effect on each contract or subcontract from the effective date of the proposed change until completion of the contract or subcontract.³⁷

In each case, therefore, the contractor is required to identify the entire, or a tailored, CAS Contract Universe. For voluntary changes, this Universe would include all covered contracts open on the implementation date of the change. For changes due to the applicability of new Standards, this would include all covered contracts open on the effective date of the change; those eligible for equitable adjustment (any contracts awarded after the Standard's effective date that were not in compliance with the new provision would be covered under the voluntary change guidelines). For noncompliant changes, the CAS Contract Universe could conceivably include contracts that were closed as of the discovery and determination of the noncompliance. Generally, the contractor would be required to identify all covered contracts affected by the noncompliance, including those completed. One interviewee interprets the DAR noncompliance provisions in this fashion:

You can open up contracts for defective pricing, fraud or a surviving clause---CAS is a surviving clause.

³⁷DAR 3-1214(b).

In a field guidance memorandum issued by their CAS Division, DCAA advises auditors that this interpretation had been upheld in Bailfield Industries, Division of A-T-C, Inc., ASBCA 19025, 15-1 BCA Para. 11,245:

Basing its opinion on the lack of a specific time limit in the [Price Reduction for Defective Cost and Pricing Data] clause and by construing the clause together with the audit and disputes clause, the Board [of Contract Appeals] ruled that the contracting officer could issue the final determination within a reasonable period of time after the expiration of three years from the date of final payment. A similar result could be expected if recovery was sought by the Government under the "Cost Accounting Standards" clause.³³

In addition to identifying the CAS Contract Universe appropriate to the change, the contractor is required to indicate the cost impact of the alteration in practices, by contract, for the lifetime of the change. For noncompliant changes, this lifetime would extend from the date of award, or date of implementation of the noncompliant practice, whichever is later, for each contract, to the date of performance completion, or date of correction of the practice, whichever is earlier. For voluntary changes and those required by new Standards, the change lifetime is from the date of implementation of the change to the date of completion of each contract.

³³DCAA, PCS Memorandum for Regional Managers, "Adjustment of Closed CAS-Covered Contracts for Noncompliance," 23 February 1977, p. 2.

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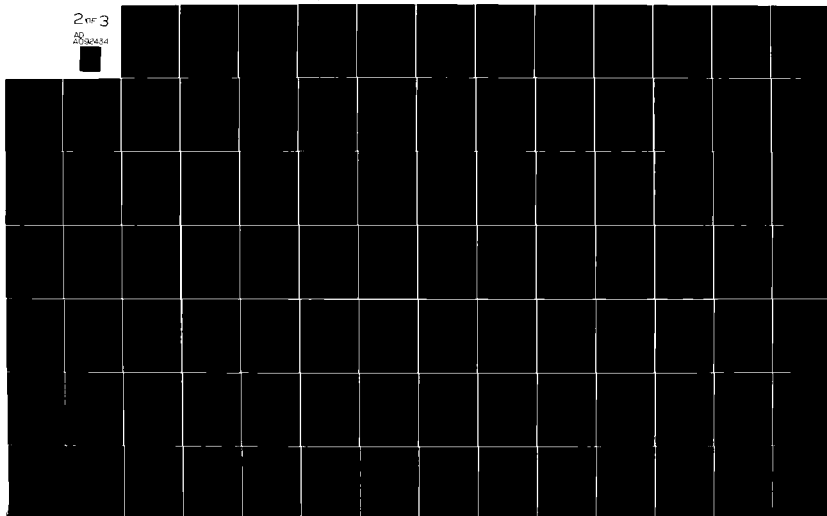
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No further guidance is available within DAR as to the cost impact assessment process, including the CIP itself. Presumably, the ACO may demand the contractor's submission be in a particular format designed to facilitate the measurement of cost impact, since the CAS Administration Clause requires the proposal to be "in the form and manner specified by the cognizant Contracting Officer," however there is no indication in the manual of any particular form or manner that would enhance the impact assessment.

b. Working Group Items

The DOD CAS Working Group advisories are available and applicable to all defense contract administrators. Thus, the Working Group Items provide a secondary potential source of guidance on cost impact proposals.

Working Group Item 76-8, published 17 December 1976, "Interim Guidance on the Use of the Offset Principle in Contract Price Adjustment Resulting from Accounting Changes," suggests possible formats useful in presenting a cost impact proposal that may facilitate the ACO's materiality and increased costs/equitable adjustment determinations and the negotiation of contract price adjustments:

No specific method for applying the offset concept has been established. It remains the responsibility of the Administrative Contracting Officer to address each specific situation in a way that best accomplishes the overall objective. One method that may simplify the computation in many instances...would be to compute the impact of a change by types of contracts (e.g., firm fixed-price, cost type) and adjust as few contract prices as necessary within each

group before merging the net impact from each contract group with that of the other groups. Different approaches may provide a better procedure in other cases. For example, contracts may be grouped according to relative materiality of the impact of the change. This type of segregation can be helpful in identifying contracts which can be eliminated from further consideration.

In the course of conducting research for this study, all CIP's made available to this researcher utilized the format recommended here, grouping the Contract Universe by contract type. This guidance, however, is all that is offered by the Working Group on the nature of the cost impact proposal.

c. Contract Administration Manual

The DLAM is applicable only to DCAS ACO's and thus guidance offered does not carry with it the wide-ranging agency-wide implications of that available from DAR and the Working Group. The DLAM, however, sheds no further light on the form and manner necessary in the cost impact proposal other than to echo DAR in requiring the contractor to submit:

...a cost impact proposal in sufficient detail to permit evaluation and negotiation of the impact upon each contract and subcontract.³⁹

The DLAM makes no substantial contribution to the search for regulatory guidance on the nature of the cost impact proposal.

2. Guidance Available to the Contract Auditor

The DCAA auditor is considered the principal advisor and expert on CAS matters available to the ACO. Though the

³⁹DLAM 1200.9b(2).

ACO also has available to him the services and recommendations of the regional CAS specialist, at his level the primary source advice is the contract auditor, generally a resident in the plant or corporate office of the covered contractor in question, familiar with the intricacies of the contractor's accounting system and privy to the books and records necessary to monitor compliance. Since the auditor frequently provides the input upon which the ACO's CAS determinations are made, the unique guidance made available by DCAA, supplementing the direction provided by DAR and the Working Group, may describe further the format and detail necessary in the contractor's cost impact proposal.

a. Defense Contract Audit Manual

The DCAA Contract Audit Manual is no more specific on the format and type of information necessary in the CIP to facilitate impact assessment than is DAR. DCAM recognizes the importance of the contractor's identification of the CAS Universe:

An integral part of the cost impact proposal is the list of CAS-covered contracts and subcontracts which will be effected by the change or noncompliance.⁴⁰

It additionally references the DAR requirements for minimum data in each circumstance:

A basic problem encountered by auditors is the proper preparation of a proposal by the contractor. DAR outlines the basic requirements of data which the contractor should

⁴⁰ DCAM L-301(c).

include in cost impact proposals (such as identification of and cost impact on each CAS-covered contract and sub-contract). If inadequately prepared, the auditor should return the proposal to the contractor through the ACO with deficiencies specifically identified.⁴¹

Thus, though DCAM charges the auditor with making recommendations to the ACO on the adequacy of the contractor's CIP submission, it offers no more guidance than that available from DAR and Working Group advisories as to any detail greater than the minimum specified by DAR that would affect the proposal's adequacy.

b. DCAA Training Guide

It is not until semi-official agency training guides developed by DCAA are consulted that substantive guidance on the format and detail necessary, and desirable, in the cost impact proposal is available. In the "Cost Impact Proposals and Contract Price Adjustments" lesson of DCAA's Advanced Cost Accounting Standards course, relatively explicit recommendations are made as to procedures to be followed in requesting and reviewing the contractor's submissions.

The training guide addresses the initial stage of the contractor's cost impact submission, the statement of general dollar magnitude, more liberally in noting the earlier

⁴¹DCAM L-301(d).

DAR interpretation that this rough order estimate cannot be utilized for materiality determinations:

There is no regulatory guidance for the specific contents and format of the general magnitude estimate. The CAS Administrative Clause, DAR 7-104.83(b), requires only that the general dollar magnitude estimate be the sum of all increases and the sum of all decreases. Although DAR 3-1212(d), 3-1213(c) and 3-1214(b) require that the ACO request a cost impact proposal detailing the cost impact by covered contract...auditors must be alert to the potential significance of the general dollar magnitude estimate since field experience indicates it is sometimes accepted by ACO's as the definitive cost impact estimate....Whenever the cost impact appears significant, or other factors (e.g., varying adjustments to various contract types) warrant a more detailed submission, the audit report should explain to the ACO why a detailed cost impact proposal is needed (in addition to citing the DAR requirement).⁴²

DCAA generally directs its auditors to pursue the second-stage CIP and persuade ACO's to refrain from making a determination, either of materiality or increased costs, from the statement of general dollar magnitude.

DCAA addresses the complications of multiple accounting changes, a potentially frequent occurrence given the propensity of contractors to implement voluntary changes at the beginning of fiscal years, simultaneous with the applicability date required in many new Standards:

Cost impacts for multiple accounting changes generally must be considered individually for each change....If a contractor submits a composite general magnitude estimate (or cost impact proposal), recommend to the ACO that the submission be returned to the contractor with a request for separate identification of the cost impact of each change.⁴³

⁴²DCAA, Advanced Cost Accounting, "Cost Impact Proposals and Contract Price Adjustments," p. 9.

⁴³Ibid.

The training guide notes the potential dichotomies that could coexist when more than one change is considered simultaneously:

The accounting changes may have varying implementation dates, thus affecting different contracts, may be a mixture of discretionary and sanctioned changes, thereby affecting the allowability of net increased costs, or may include both deliberate and inadvertent noncompliance, which would affect the application of offsets. The point to remember is this: Multiple accounting changes cannot generally be considered---or audited---in the aggregate. If the contractor does not separate the cost impact by individual change, the auditor will have to.⁴⁴

Thus, DCAA makes a case for the necessity of considering accounting changes individually and a requirement that a contractor identify and submit cost impact assessments of the changes in the same manner.

The DCAA training guide additionally offers the first "official" guidance on beneficial detail to be contained within the CIP above DAR requirements:

The following detail should be requested from the contractor by the ACO to adequately evaluate the proposals and negotiate the price adjustment:

A. A listing of all CAS-covered contracts and sub-contracts, including the contractor/subcontract number, purchasing office, contract type, funding provisions, and period of performance.

B. The impact of each contract/subcontract, including (where appropriate) the following:

1. Target/estimated cost
2. Target profit or fee
3. Sharing ratio
4. Ceiling price
5. Cost impact
6. Profit or fee impact
7. Total impact⁴⁵

⁴⁴Ibid, p. 10.

⁴⁵Ibid, p. 11.

Admittedly, this information should be available in the contract administration office. However, it is much more convenient to the ACO to have the contractor specify this detail, the collection of which should require less effort than that required by the ACO. Each aspect, moreover, must be considered in the negotiation of contract price adjustments: the incentive structure of the contract will affect the increase or decrease in cost allocation borne by the Government; targets and ceilings may require adjustment after the price has been changed; and profit or fee levels may legitimately need to be considered for adjustment to follow the adjustment to cost levels. Inclusion of this detail forces the contractor to consider the effects of these factors and this consideration establishes a common baseline for the subsequent negotiation.

Finally, the DCAA training guide contains the first mention of any required substantiation necessary with the submission of the cost impact proposal:

The provisions of DAR 3-807.3, Cost or Pricing Data, apply to cost impact proposal submission. Accordingly, when a contract price adjustment proposal includes, for any individual negotiated contract, aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$100,000, the contractor is required to submit cost or pricing data in accordance with DAR 16-206 and to complete the appropriate certification.⁴⁶

⁴⁶Ibid.

Thus, DCAA recommends the use of a DD Form 633, Contract Pricing Proposal, when appropriate, as a summarization of the CIP and applies the certification of cost or pricing data provision of the Truth in Negotiations Act when the cumulative effect of the contract's increases and decreases exceeds the P.L. 87-653 threshold.

C. GUIDANCE ON CIP PRICING METHODOLOGIES

After examining the guidance and direction available to the ACO on the form and substance of the cost impact proposal, in terms of format, data and substantiation requirements, it is appropriate to discuss the pricing methodologies utilized for the quantitative assessment of the shift in cost allocation caused by the CAP change. Both recommendations and mandates, general and specific, on the appropriate methodology for each circumstance are available to the ACO, auditor and contractor from three disparate sources.

1. CASB-Generated Methodologies

DOD contract administrators and procurement policy makers have looked first to the Board's Rules and Regulations as a source of guidance on the assessment of cost impact. The sole pricing methodology described by Part 331 pertains only to noncompliant changes to firm fixed-price contracts:

Subsequently, if the contractor fails during contract performance to follow his disclosed practices or to comply with applicable Cost Accounting Standards, any increased cost to the United States by reason of that failure must be measured by the difference between the cost estimates used in negotiations and the cost estimates that would

have been used had the contractor proposed on the basis of the practices actually used during contract performance.⁴⁷

This methodology, referred to as contract repricing, generally involves an attempt to compare the proposal cost data and the disclosed or established practices that were used to justify the original negotiated price with a price developed from the proposal cost data and the performance noncompliant practices discovered. The difference between the two prices, the agreed-upon fixed price, and the price that would have been agreed on had the contractor proposed, using the original cost estimates, with the noncompliant practices, is the cost impact. One interviewee summarized contract repricing in this fashion:

It is not uncommon to have to determine after the fact what the cost impact of different events might have been. That's the case whenever you're in the process of measuring anything like damages. You're in a constructive, imputed environment---you discover the facts after the event and you have to go back and try to reconstruct what the event would have been like had the facts been known. The purpose of equitable adjustment in the Government procurement environment, the courts have said, in a delay or engineering change order scenario, is an attempt to place the parties back in the position they would have been in had the event not occurred. That's basically what we expect to be accomplished under changes in CAP's. We expect to discover what the contract price would have been had these new facts [the noncompliant practices] been known at the time of negotiation. It's essentially a reconstruction.

Thus, the CASB offers the primary guidance on the appropriate pricing methodology to be used to assess cost impact when

⁴⁷ 4 CFR 331.70(b).

noncompliance is discovered in a firm fixed-price contract. The noncompliant CAP's are imputed into the negotiations with the original cost estimates. The difference between the fixed-price and the reconstructed price is the cost impact. If the noncompliant practices result in a lower level of cost allocation to that firm fixed-price contract, the cost impact is considered increased costs.

The repricing methodology is simply a variation on the methodology utilized to assess the effect of defective pricing. In defective pricing, however, the CAP's are held constant and the cost data varied over the two comparisons.

2. Alternate Pricing Methodologies

In December 1976, the CASB recognized the existence of an alternate method of pricing the effect of CAP changes. Though the Board intended this method as an option in the firm fixed-price noncompliance scenario, it was the first CASB sanction of the "estimate-to-complete" or "current cost" method:

...If, however, negotiations were not based on the cost estimates, or if the cost estimates which were used are not readily determinable by the procuring agency, any increased costs to the United States by reason of that failure may be measured by the difference between the costs that would have been allocated if the failure had not arisen and the costs that will be allocated under the practice followed or to be followed by the contractor....⁴⁸

⁴⁸CASB Proposed Rule, Part 331.70(b), January 1977.

Though this option was merely proposed and never adopted by the Board, it provides an introduction to the estimate-to-complete methodology currently in use to price the cost impact of changes to new Standards and voluntary changes.

Estimate-to-complete (ETC) pricing involves the use of current cost data and estimates to establish the cost impact of changes to CAP's. The contractor is requested to propose the cost of completing the contract, from the implementation date of the change to performance completion utilizing the current CAP's and the changed CAP's. The quantum difference is considered the cost impact of the change. That cost impact, considering the type of contract and the type of CAP change, will be utilized by the ACO to determine the potential incurrence of increased costs or the level of the equitable adjustment due the contractor.

ETC pricing is generally prospective in nature, utilizing current cost estimates, where repricing is both retrospective and prospective, depending upon when the noncompliance will be corrected, utilizing original cost estimates. The ETC method is a variant of the methodology recommended by ASPM No. 1 for pricing contract change orders. In the ETC method, however, the addition or deletion of costs is caused by the changes in cost accounting practices, not a change in the level of effort.

Other methodologies currently in use to price contract change orders cannot be successfully adapted to assessing cost impact of CAP changes. Each recognizes, either objectively

or subjectively, the deletion of old work, change over from old work to new work and addition of new work; all phenomena inapplicable to a change in cost accounting practices. The "Total Cost Method," the least favorable of all performance change pricing methodologies, which weighs the total actual cost against the total originally expected cost, can be dismissed for the same reasons it is criticized as an approach to changed work. It is unable to distinguish costs related to the change from costs caused by inefficiency or other factors.

3. Current DOD Guidance

On 17 December 1976, the DOD CAS Working Group provided the first official guidance to ACO's and contract auditors on pricing methodologies for cost impact assessment:

Cost adjustments under either mandatory, (a)(4)(A), or voluntary, (a)(4)(B), changes should generally be the net difference between the current estimated cost to complete using the old accounting methods and the same estimate reconstructed to reflect the new methods.

Adjustments relating to noncompliance, (a)(5), under firm fixed-price contracts, must comply with the CAS Board's requirements to use original cost estimates reflecting the noncompliant and compliant treatments. Should this prove impracticable, the problem should be forwarded through appropriate channels to the CAS Working Group.⁴⁹

Though DAR, DLAM and ASPM No. 1 are silent on pricing methodologies, DCAM essentially echoes the guidance provided

⁴⁹DOD CAS Working Group Item 76-9 of 17 December 1976.

by the Working Group. These latter two sources of direction and advice form the sum total of DOD guidance on cost impact assessment for the ACO and auditor.

D. SUMMARY

The purpose of this Chapter was to identify the statutory, regulatory and practical environment surrounding the administration of Cost Accounting Standards. In the course of reviewing this environment, the conceptual and procedural obligations on each party defined by the CAS Contract Clause and the CAS Administration Clause were described. Additionally, the roles and responsibilities of the primary Government players in the CAS administration process were discussed. As a result of the background established, a model of CAS administration was presented that detailed the actions and decision points involved in the implementation of changes to CAP's or the discovery of noncompliance. Out of this model, the cost impact assessment cycle, the heart of CAS administration, was presented. The major milestones of the cycle were represented as a schedule, utilizing the time constraints presented by DAR and, specifically, the CAS Administration Clause.

The remainder of the Chapter served to cite and summarize those passages of official and semi-official guidance available to the primary Government representatives in CAS administration, the ACO and auditor, on the nature of the two-stage assessment proposal and the cost impact pricing methodologies endorsed

and in use. As a result of culling references from DAR, DLAM, DCAM, Working Group advisories and other sources, this section of the Chapter reviewed the sum total of the guidance available to DOD contract administrators on cost impact assessment.

The ACO assumes the responsibility of guiding covered contracts through CAS administration with little more official guidance and background than has been presented here. The administration process remains a highly complex evolution. The difficulties and hindrances encountered by the DOD contract administrators dealing with those inherent complexities during the life of the contract largely determine the nature and success of the procurement agency's response to the needs recognized with the inception of Cost Accounting Standards.

IV. HINDRANCES TO THE COST IMPACT ASSESSMENT PROCESS

For Cost Accounting Standards to be an effective system of Governmental controls on the cradle to grave treatment of costs associated with negotiated defense contract proposals and performance, it is vital that the consistency edicts and the increased costs prohibition of the system be accompanied by a regulated, workable process of correcting the effects of inconsistency on the parties by either preventing, or amending, the payment of increased costs or by restoring the contractor to his original stature with a settlement for any damages borne by him. As the system's predominant administration and compliance monitor, the Department of Defense makes use of the cost impact assessment process to respond to this need. Thus, cost impact assessment, the measurement of shifts in costs between contracts due to alterations in cost measurement, assignment and allocation, is necessary and significant to CAS administration.

This Chapter will discuss the hindrances to successful administration of the cost impact assessment process discovered during the course of the research. Citations of the problems will rely heavily upon the findings of prior studies and the independent observations of involved industry and Government officials interviewed. Where opposing views were collected,

both assertions will be presented. Suggestions for resolution of some issues, where received or developed, will also be offered.

A. PROBLEMS WITH THE PRICING METHODOLOGIES

Chapter Three briefly introduced the pricing methodologies in use to assess cost impact. A more extensive exploration of contract repricing and the estimate-to-complete methods is necessary, however. A thorough search of the limited literature published was conducted and extensive discussions with accountants and auditors from both sectors were held in an effort to determine the mechanics of the two methodologies. In the course of this research, flaws and trade-offs inherent within these pricing techniques were revealed. The results of this portion of the study are presented in this section.

1. Contract Repricing

This methodology is an analogue of the traditional technique utilized to assess the effects of defective pricing,

Certified cost or pricing data subsequently found to have been inaccurate, incomplete or noncurrent as of the effective date of the certificate.¹

The measurement of any quantum increase caused by less than current, accurate or complete cost or pricing data is accomplished by reconstructing the proposal, replacing the defective data with the valid data discovered. The difference between

¹ASPM No. 1, p. 1A-B7.

the defective and valid cost estimate, burdened with subsequent allocations of indirect cost pools and profit loading, is the defective pricing impact and the amount proper for downward contract price adjustment. In theory, this method of assessment and adjustment presumes that the previously agreed upon price would have been decreased by the amount of the defect, plus related indirect expenses and profit, had the defect been known at the time of negotiation.

Contract repricing also attempts to impute the later discovery of facts, the noncompliant change in accounting practices, to an earlier time frame, when those facts, had they been known, would have affected the outcome of price negotiations. The CASB requires the ACO to reconstruct a contract price, using original cost estimates, with both compliant and noncompliant CAP's. The difference between the two prices is the cost impact.

One interviewee argued that P.L. 91-379 was a response to the cost effects experienced by the contract parties when the contractor fails to comply with accepted or assumed methods or techniques of cost measurement, assignment or allocation:

Congress obviously intended something to be done. Look through the legislative history. You will find that one of the things they were concerned about was the contractor who negotiates a price on one basis and then switches his accounting practices and, as a result, the costs that were to be thrown against that contract suddenly do not appear. That alone, in the view of many people, was a basis for reducing the price of that contract, because the Government

made certain assumptions that the contractor would maintain consistency [in his cost accounting practices or compliance with CAS] for the life of the contract.

When those assumptions fail to hold in performance, action must be taken to prevent the contractor from recovering reimbursement twice for the costs shifted. The measurement of the shift is accomplished by interpolating the negotiation cost assumptions into the noncompliant practices. Contract repricing accomplishes this assessment for all types of contracts.

The Board's mandate in Part 331.70(b), that cost impact of noncompliance in firm fixed-price covered contracts

...must be measured by the difference between the cost estimates used in negotiations and the cost estimates that would have been used had the contractor proposed on the basis of practices actually used...

validates contract repricing as the proper methodology for assessing cost impact for noncompliant changes. It is therefore appropriate to explore the mechanics of contract repricing in noncompliance scenarios.

a. Proposal Reconstruction

A strict interpretation of the Board's requirement to reprice the contract utilizing original cost estimates would seem to direct the ACO to establish cost impact as the quantum difference between the compliant proposal and a restructured "noncompliant" proposal. This, in fact, is an accurate representation of the methodology utilized in defective pricing. In one example of a series of scenarios presented,

ASPM No. 1 suggests that the reconstruction of proposal costs leads to a valid measurement of the effects of defective pricing:

Four. Proposal includes total material at \$650. Analysis of selected items on the bill of materials shows them to be overpriced an average of ten per cent. Total estimate is reduced ten per cent to \$585 for negotiation objective. Post-award audit shows a subcontract item, not one of the items sampled in analysis, estimated initially at \$100 but actually contracted for, two weeks before negotiations started, at a price of \$75. Defect: \$25 plus burden and profit. (You relied on the ²\$100 even though the bill of materials was reduced 10%).

This guidance seems to discourage any inclination of the ACO to assess the defect as \$22.50 (\$25 x 90%), to represent the effect of the proposal reduction achieved during negotiations. Avoiding, at this point, any discussion of the equity of ignoring the proposal reduction achieved, the problems inherent in "proposal reconstruction" as a subset of contract repricing can be examined.

The detail with which the contractor proposes to perform the contract can vary widely. At one extreme, the contractor may be predominantly, or exclusively, dependent upon Government work, may be required to disclose his cost accounting practices and may have provided elaborate substantiation of his cost estimates via certified cost or pricing data. At the other end of the spectrum, however, may be a contractor new to Government performance requirements, exempted from the submission

²ASPM No. 1, p. 9B12.

of a Disclosure Statement and competing for a contract that will benefit from adequate price competition, thereby inapplicable to the dictums of the Truth in Negotiations Act. Under different circumstances, each offeror could conceivably be eligible for award of a covered contract and each susceptible to CAS noncompliance. The proposal submitted by the former would be detailed and exposed to rigorous contract audit; the proposal submitted by the latter might be limited to a priced offer only, devoid of cost detail. Incidence of noncompliance in either case, however, would call for proposal reconstruction in order to assess cost impact.

Solid, justifiable, proposal reconstruction requires a thorough knowledge of the contractor's disclosed and established cost accounting practices and original cost estimates, substantiated by cost or pricing data. If this information is available, the cost impact of noncompliance can be assessed by developing a "noncompliant" contra-proposal that incorporates the noncompliant treatment of original cost estimates. An estimated total cost could then be abstracted and the impact, if it resulted in the allocation of a lower level of costs to a firm fixed-price contract or a higher level of costs to a flexibly priced contract, would become the ACO's negotiation objective for a downward price adjustment to the contract.

Lacking the necessary proposal cost detail to perform proposal reconstruction, efforts to assess cost impact of noncompliant changes are stymied. Short of re-opening negotiations to establish a cost element breakdown of the original proposal, a laborious and unattractive prospect, the ACO is left with no solution, under present CAS Rules and Regulations. The Board has offered two remedies to this problem, one which was not adopted and one which remains in the "proposed rule" stage as of this writing.

The previously-mentioned 1977 proposal to offer the estimate-to-complete pricing methodology as an alternative to contract repricing, when proposal cost detail is inadequate, was deleted from the change proposed to Part 331:

On December 29, 1976, a proposal was published in the Federal Register to amend 331.70(b) which, if adopted, would have permitted procurement agencies to use either an estimate-to-complete approach or an original-negotiation-data approach to determine increased costs paid by the United States. As proposed, agencies would have been authorized to use the estimate-to-complete method when negotiations had not been based on cost estimates or such estimates were not readily determinable by the procurement agencies.

Most of the comments received expressed opposition to all or part of the proposal. Upon reexamining the subject in light of the comments received, the Board concludes that the proposed alternative method would not provide sufficient improvement in the administration of Standards to warrant its adoption.³

Its deletion was a reaction to criticism of the estimate-to-complete method, which will be discussed in a succeeding section

³General Comments prefacing amendment of 4 CFR 331, 43 F.R. 9775, 10 March 1978.

of this Chapter, and the common industry perception that the rule change would leave the choice of pricing methodology to the procurement agency, not subject to negotiation.

The Board's second, and most recent, attempt to ameliorate the difficulty inherent in assessing cost impact of noncompliance in a contract lacking sufficient proposal cost detail was offered in a proposed rule amendment to Part 331, published 8 February 1980:

...the Board proposes to amend 331.30(b) to exempt firm fixed-price contracts which are awarded without submission of any contractor cost data.⁴

The proposal to exempt firm fixed-price contracts which require no proposal certification or submission of cost estimates for analysis is a sound solution. Contract prices that are not determined on the basis of cost estimates, and therefore unaffected by the contractor's disclosed or established CAP's, need not be adjusted for a deviation discovered or subsequent change to practices. Price fairness and reasonableness have been established through alternate means.

b. Price Restructuring

There are strong arguments levied against proposal reconstruction. In addition to the difficulty inherent in the attempt to interpolate current knowledge of the change into a proposal that was submitted months prior to the attempt, a question of equity exists:

⁴General Comments prefacing amendment of 4 CFR 331, 8 February 1980.

Adjustments based on the contractor's original proposal can overstate or understate the true amount of [cost impact and therefore] "increased" cost paid by the Government.⁵

In the majority of cases, the Government negotiator and contractor reach agreement upon a contract price less than that proposed by the contractor. Depending upon the size of the reduction achieved by the Government, assessing cost impact by means of proposed levels of cost elements may result in an inequitable downward adjustment to the contract price. Defective pricing guidance from ASPM No. 1 notwithstanding, measuring cost impact via a proposed level of costs, when neither the proposal price nor the magnitude of the proposal cost elements were agreed upon by the contract parties, leads to an adjustment that will make the Government more than whole; that will collect, or prevent, increased costs and more.

To avoid the potential for inequitable price adjustments another variant of contract pricing is widely utilized. This alternate subset of contract repricing may be referred to as "price restructuring," since it establishes the negotiated contract price as a baseline, not the proposal cost estimates. Cost impact is then assessed as the difference between the agreed upon price and the price that would have been agreed upon had the noncompliance been known during

⁵Procurement Associates, Inc., Cost Accounting Standards, p. XIII-27.

negotiations. But price restructuring is not without its complications.

Given a detailed cost proposal, the contractor's estimates of cost elements, assignment of direct costs and allocations of indirect cost pools to the contract are known and available for proposal reconstruction. When price restructuring is chosen, however, the baseline used for comparison is limited to the contract price. Cost impact assessment requires knowledge of, or agreement upon, cost elements. These elements are then subjected to the compliant and non-compliant treatment and the quantum between resultants is the cost impact of the noncompliance. In order to utilize price restructuring, a method or technique of restructuring, or breaking down, the price into cost elements is needed.

One way suggested by a private sector accountant interviewed to restructure the price into cost elements is to prorate the proposal:

If I were required to reprice the contract, I would use a very simplistic method, taking the proposal costs and scaling them down to the agreed upon price. I don't know any other way to do it.

Admittedly, this method is simplistic and arbitrary.

Nonetheless, "shrinking the proposal" may be utilized.

An alternate method to restructure price would require reopening negotiations with the contractor to agree on a cost breakdown of price. But this would require negotiating levels of cost elements to reach agreement on details at

mid-performance when this agreement was neither feasible nor attempted during the original price negotiations. When recovery, or reduction, of costs is dependent upon negotiations, and each party is aware of the effect agreement on cost elements will have on the cost impact determinations, the probability of successfully negotiating a restructuring of price will be extremely low. As one interviewee stated:

The biggest problem in repricing is you've got one price and both parties will tell you they got there different ways.

Neither method available for price restructuring will bring a wholly satisfactory solution to both parties in all circumstances. One contractor's representative argued that repricing the contract through price restructuring is not viable:

...shrinking the proposal to the price agreed upon in the negotiations could create some major distortions in what the contractor would have to absorb. This could also result in an inequity. If the Government succeeded in reducing the contractor's proposal by ten per cent, it does not follow that repricing the contract by reducing each element in the contractor's proposal by ten per cent would be either in the best interest of the Government or the contractor. Reopening negotiations to establish cost elements would almost certainly result in an impasse---and would seldom lead to agreement. That would be opening Pandora's box. I don't have any resolution to the question...

c. Other Difficulties with Contract Repricing

Several interviewees reported that allegations of defective pricing by contract auditors were a natural outgrowth of any attempt to reprice a contract via price restructuring. One Government official interviewed independently

raised the issue when questioned as to the recommended method of adjusting proposal price to agreed upon price:

Any...adjustments have to made in profit. Otherwise, the contractor is guilty of defective pricing...The only horse-trading should be over profit!

Though charges of defective pricing might cloud the cost impact issue, some auditors have apparently used this threat to convince noncompliant contractors that proposal reconstruction, and the larger cost impact determined thereby, is the proper method to assess cost impact. One accountant for a major electronics firm claimed that this is a frequent Government tactic:

That's what I mean by problems of interpretation. DCAA will start the conversation by saying, Now if you want to change this [cost element], you're guilty of defective pricing!

Thus, attempts by the contractor to restructure the price by reducing cost elements from the proposal have been occasionally thwarted by Government charges of defective pricing. These charges, in the contract repricing arena, however, are inappropriate and invalid. Defective pricing determinations are based upon the contractor's knowledge of costs at the time of negotiations. Unless it can be proved that he presented certified cost or pricing data that he knew was noncurrent, inaccurate or incomplete, defective pricing is not an issue.

One contractor's representative warned that any attempt to negotiate cost elements, either as a result of a

lack of proposal detail or in an attempt to restructure price, would inevitably have to be based on the contractor's cost experience. The Government could question allowability and allocability only, not reasonableness, of incurred costs:

When you go back and assess cost impact via repricing, in effect you're opening the door for a renegotiation of the contract. There's no question about it. The result of that would be the contractor would end up getting actual costs plus profit. Especially if the contract is closed!

This renegotiation would seldom be in the Government's best interest.

Industry representatives were also wary of revealing actual cost data that might be required for any renegotiation:

Two years after the fact, you want to know our costs? And whether we've overrun and underrun, you're going to forget what we incurred and renegotiate? No way! We'll never succeed in containing the negotiation to just the cost impact of the CAP change. We'll find creeping in the effects of inflation, the fact that we planned to do it this way, but we did it that way, we had a switch in our make-or-buy plan, we planned no overtime, but we had to work it and all sorts of other things. Realistically, if we had an underrun on an FFP, I defy anyone to say that the Government would ignore that! But if a contractor had an overrun, the Government would leave him with it!

Contract repricing, under many circumstances, may be feasible and the most theoretically valid cost impact assessment pricing methodology to apply to proposal noncompliance, i.e., noncompliance discovered in the contractor's proposal. It can also be used to measure the cost impact of violations of Standard 401, when the contractor proposes with one set of CAP's and performs with another. In each case, if sufficient cost data is available, or if agreement between parties can be

reached on the levels of cost elements in the proposal or price, contract repricing can assess the shift in allocation caused by the deviation in practices. If, however, noncompliance is the result of a shift in practices mid-performance, or performance noncompliance, contract repricing cannot be adapted.

Performance noncompliance may result from a voluntary change or misinterpretation of the implementation requirements of a new Standard. Whatever the source, the ACO and auditor must assess the cost impact related to a period of noncompliance that begins after a compliant period of performance immediately following award. The pricing methodology utilized to assess this impact must be capable of incorporating these facts. Utilization of contract repricing would burden the contractor for the period in which he was compliant, unless it was possible to reprice his proposal to recognize the CAP alteration at mid-performance. Despite assurances to the contrary by several Government officials interviewed, interpolating the effect of performance noncompliance upon the proposal would require the prior submission of the contractor's intended schedule for incurring costs. Contractors are rarely required to submit this type of information. As one responded:

Normally, you don't have a time-phased proposal. You might have a schedule of costs on a year-by-year basis, but what do you do if noncompliance occurs in May? Use 5/12ths of the cost?

As will be discussed in the following section of this Chapter the cost impact of performance noncompliance might better be assessed by the estimate-to-complete method.

d. Summary

Thus, contract repricing, theoretically valid and analogous to the accepted method of assessing cost impact of defective pricing, is not without its complications. The methodologies that utilize the contractor's proposal as a baseline, proposal reconstruction or shrinking the proposal to establish a cost breakdown of price, may require some manipulation of the original cost estimate. The proposal might have to be reduced by any costs declared unallowable before the computation of cost impact. Or, the ACO may not desire to accept the profit level proposed by the contractor, and instead, may want to substitute one determined by Weighted Guidelines. The latter action may lead to immediate disagreement. Other drawbacks have been recognized. Proposal reconstruction may not be adaptable to circumstances where a sufficient level of proposal cost detail is unavailable. Additionally, this method may result in an overstatement or understatement of cost impact. Price restructuring may require arbitrary or laborious analysis techniques to subdivide the agreed upon price into cost elements. Defective pricing allegations or the reluctance or requirement to use actual cost data in either technique may obscure or frustrate the process. Finally, no methodology for contract repricing is

available to properly measure the cost impact of performance noncompliance.

2. Estimate-To-Complete Method

The estimate-to-complete (ETC) pricing methodology is considerably less complex to utilize than the contract repricing methodology. Computation relies upon current cost data and a prospective forecast of cost estimates (where contract repricing is based upon original cost estimates and recomputation of proposal costs or contract price). As such, ETC is an analogue of the traditional method of assessing the cost impact of contract change orders. It requires a proposal of costs to complete performance both with the change and without the change and the production and certification of actual cost experience to the point of the change. Utilizing this analogy, the ETC methodology of assessing cost impact of cost accounting practice changes can be explored.

a. The Methodology

ETC pricing is appropriate when the Government receives advance notification of the impending change in CAP's. This notification is contained within the contractor's proposal to make voluntary changes or mandatory changes to implement new Standards. Assessment and negotiation of the cost impact can then proceed in much the same manner, and under similar bargaining conditions, as the original price negotiations.

When the contractor proposes a change, he is required to submit a proposal that provides a forecast of

costs to complete the contract with the change in CAP's and a forecast of costs to complete the contract without the change in CAP's. His data on costs incurred to date, i.e., current costs, should be certified and summarized on a Form DD 633 and serve as the cost or pricing data utilized to develop both estimates. The quantum difference between the two ETC forecasts is the cost impact of the change and, once audited and subjected to cost and/or price analysis, should be utilized to develop the ACO's negotiation objective. The contract price adjustment, equitable adjustment or downward only, will be dependent upon the source of the change.

b. Problems with the ETC Methodology

The ETC methodology can be complicated significantly by the presence of undefinitized contract change orders and the inclusion of the costs of these changes in the forecasts. Because these costs associated with the completion of contract modifications remain the subject of future negotiations, they must be eliminated from both ETC estimates. If they are not deleted, any subsequent attempt to price the cost of contract change orders will result in a double consideration of the costs: once, during the cost impact assessment process, when they may muddle the measurement; and again, when the change order is negotiated. Though this segregation of costs from the forecast is required, it may be difficult to accomplish with any degree of precision. The price of the change, nonetheless, is most properly assessed after the cost impact assessment in accordance with the new CAP's.

Another problem inherent in the ETC methodology is common to techniques currently in use to price contract change orders. Though ACO's may find it possible to delete the costs of unpriced changes in performance from the ETC forecasts, they may find it a challenge to reasonably assure themselves that the effects of conditions unassociated with the change in CAP's are eliminated from the assessments. There is a danger that the effects of inefficiency or inflation, that lead to overruns, or the effects of cost reductions or business prudence, that lead to underruns, may irrevocably color the forecasts. One commentator declared that the 1977 reaction to the Board's proposal to offer ETC as an endorsed pricing methodology was due to similar concerns in an FFP scenario:

There were substantial objections to [using]...ETC for the very simple reason that you could end up with the ETC swing, in theory, exceeding the whole [FFP] contract price. Thus, if you use ETC, you're working with current costs. And you can get some wildly inflated prices. As a result of which, you can recover costs far, far more than you would have using repricing.

The use of current cost data, though convenient, carries with it the hazard that factors unrelated to the contractor's change in CAP's may magnify or diminish the actual cost impact. The ETC pricing methodology, however, will inevitably attribute the cost impact to the accounting change only (thus, the necessity for eliminating costs associated with unpriced change orders). The ACO, under the principle of equity, is charged with making a contract adjustment, either up or down,

seeking a prevention of increased costs or an equitable adjustment, that returns both parties to a footing equivalent to that enjoyed by each before the change. This implication requires the ACO to insure that neither the contractor's profit nor loss position is increased as a result of the CAP change and contract price adjustment.

Hal Sharp, the author of Procurement Associates' "Cost Impact Studies---Contract Price Adjustments" chapter, in Cost Accounting Standards, suggests that a simple scaling-up or scaling-down of the ETC-measured cost impact may be effected to alleviate the cost phenomena external to the accounting change:

...the current cost method [(ETC method)] is used and the results are adjusted in relation to the negotiated cost or price and the estimate-at-completion of the contract.⁶

Sharp thus recommends that the impact measured by the ETC method, when it is suspected that the measurement has been over- or understated, be multiplied by a ratio of the original negotiated contract price divided by the EAC without the change (costs incurred to date plus the ETC forecast without the change). This adjustment would diminish the impact measured when the contractor is in an overrun situation and increase it when the contractor is in an underrun situation. Though this solution may be as arbitrary as that suggested for price

⁶Procurement Associates, Inc., Cost Accounting Standards, p. XIII-28.

restructuring, it accomplishes the purpose intended. During one interview, it was discovered that this method was actually utilized in a cost impact assessment:

We had to submit a cost impact proposal for CAS 410 that was as complicated as you could get...What we did was take the original definitized contract, purge out those elements of costs that were related to subsequent changes in scope, non-definitized work, and take the indicated final cost and compute a percentage ratio of negotiated cost to it. We then applied that ratio to the impact.... It was messy...(but) we understood what we were doing.

Finally, the performance noncompliance issue may be discussed. The ETC methodology, in its assessment of a period of performance and associated cost allocation that is only a portion of the entire performance period, i.e., the period from the implementation of the CAP change to performance completion, is better suited to performance noncompliance. As previously discussed, repricing can only be successfully utilized if it is capable of interpolating into the proposal the effect of the mid-performance noncompliant change. Unless the contractor has proposed in a manner that indicates his intended schedule of incurring costs, repricing cannot capture the effect of the contractor's actions. Therefore, except in cases where the noncompliant change is implemented at the beginning of a fiscal year, it appears that the ETC methodology should be applied. In cases where the cost impact assessed thereby may not be representative of the impact that would be measured by repricing, if the latter were feasible, a strong argument can be made for using the Sharp multiplier to adjust the impact measured by ETC.

c. Summary

As noted by an interviewee, there are objections to the estimate-to-complete method:

The ETC [method] may not be the most accurate. Not as clean, as black and white, as an auditor would like--- they'll want to reprice. But [repricing] is optimum, not realistic!

Nonetheless, it is widely used and accepted for the measurement of cost impact of mandatory and voluntary changes.

The simplicity of the ETC methodology should not, however, mislead the ACO into ignoring its weaknesses. The costs associated with undefinitized changes must be eliminated from the forecasts. Additionally, care must be taken to avoid the overstatement or understatement of cost impact that may be inherent in the use of current cost estimates, yet unrelated to the accounting change. Consideration of the use of the Sharp multiplier should be given if the impact is believed to be significantly inflated or deflated. The cost impact of performance noncompliance should be assessed via the ETC methodology, again with consideration of the multiplier, except in the few cases where repricing can feasibly capture the effect of the noncompliance.

3. The Appropriate Methodology

The previous discussion makes it apparent that each of the major cost impact assessment pricing methodologies pose potential problems of equity and practicality. Additionally, since slight variations on each methodology are available

for use, each forces the ACO to weigh the trade-offs inherent within the variants and the choice of methodology. Generally, the trade-off is made between the precision offered by the methodology chosen and the administrative cost and feasibility of its use.

It is possible to make some generalities. Repricing seems to be the most valid option when a CAP deviation occurs in the proposal, or when the measurement, assignment or allocation technique used throughout performance represents a deviation from the CAP's disclosed or established. Given the necessary detail available, a reconstruction of the proposal may yield a theoretically valid and precise assessment of impact. Conversely, price restructuring, a repricing variation, may be the most appropriate when the agreed upon price represents a significant reduction from that proposed. In both cases, actual cost data may be utilized to assist in establishing a negotiated cost baseline from which assessment can be made. Although the case was argued, in the repricing discussion, that the ACO should introduce actual cost data only as a last resort, a renegotiation of proposal or price elements may be equitable and feasible for both parties.

The estimate-to-complete methodology appears to be sound when the ACO is called upon to assess the impact of a period that is less than the period of performance, as in mandatory and voluntary changes and performance noncompliance.

The ETC method can also be adapted, and the cost impact measured thereby adjusted, to diminish the effects of cost growth or reduction unrelated to the accounting change.

Since the ACO is responsible for the proper assessment of cost impact and the equity of related price adjustments, it should be apparent that, within the general guidelines outlined above, the impact assessment process must be flexible enough to maximize equity and feasibility in the choice of pricing methodology.

Unfortunately, as mentioned in Chapter III, DOD regulatory guidance does not encourage this necessary flexibility. In fact, as evidenced by the DCAM passage cited below, it requires a methodology in one case, performance noncompliance, that seems inappropriate and often infeasible, in view of the earlier discussion:

Consequently, if the contractor failed to accumulate costs in consonance with its disclosed or established practices and applicable standards, the appropriate adjustment for the noncompliance will be computed as described [(contract repricing)]. For noncompliances on flexibly-priced contracts the "increased cost" to the Government is the difference between the current cost at completion under the noncompliant method and the same estimate reconstructed under the compliant method.

Cost adjustments for either mandatory or voluntary changes should generally be the net difference between the current estimated cost to complete under the old accounting method and the same estimate reconstructed to reflect the new method.⁷

⁷DCAM L-302(c) and (d).

No DOD policy-making organization offers any further elaboration on the variants available within each methodology that can be adapted to the pricing task. Interviews conducted for this study indicate that the minimal pricing guidance published is rigidly implemented in the field with generally no allowances for flexibility, even within the guidelines. As a result, disagreement between parties over the methodology appropriate to the circumstances protracts the cost impact assessment process, at best a lengthy evolution, and impedes resolution.

In view of the variety of CAP change scenarios that can be posited, the range of cost detail that can be available to hinder or facilitate the measurement, and the necessity to address feasibility and equity in the choice of method, an agency-wide policy of pricing flexibility and additional guidance on pricing methodologies may be needed.

B. PROBLEMS WITH THE CAS ADMINISTRATION PROCESS

Any close scrutiny of Cost Accounting Standards administration and any frank discussions with affected and involved personnel will reveal to the researcher a host of issues and opinions challenging the viability and propriety of the process. This is neither surprising nor particularly revealing. CAS remains a highly emotional and controversial program.

But discovery of procedural and conceptual problems that actually frustrate the cost impact assessment of CAP changes,

the heart of CAS administration, should be followed by a more intensive study, particularly if a solution to the problems is within DOD's power. A discussion of these hindrances to the efficient conduct of the impact assessment process follows.

1. Inability to Identify the Contract Universe

When a CAP change is proposed, or a deviation discovered, in one contract, an analysis must be made of all covered contracts to investigate the source or destination of the costs shifted by the change. In general, a change in measurement, assignment or allocation methods causes movements of costs that were not anticipated in each contract's pricing structure. The shift in costs must be traced through each contract containing the CAS Contract Clause. By virtue of the inclusion of this clause in the contract, action by the parties to amend the effects of the shift is required.

In a 1976 report to Congress,⁸ GAO charged that difficulties in identifying the CAS Contract Universe, those covered contracts and subcontracts open, and potentially affected, during the lifetime of the CAP change, were preventing the thorough analysis required of cost impact. Many DCAS regional and plant offices were attempting to maintain local records from which the contractor's CIP listing of covered contracts could be verified. GAO felt this was both time consuming and inaccurate.

⁸ "Status Report on the Cost Accounting Standards Program--- Accomplishments and Problems," PSAD-76-154, 20 August 1976.

In response to GAO's criticism, the DOD CAS Working Group advised ACO's to require covered contractors "...to maintain a system for identifying accurately and completely..." the CAS Contract Universe.⁹ The DCAA auditor is now required to verify the presence, and effectiveness, of the contractor's system in many cases, not each individual CIP listing:

At larger contractors the auditor should review the adequacy of the contractor's procedures and report to the ACO if the contractor does not maintain the required records. Once the procedure has been validated, the auditor should perform limited test checks of contract listings on specific cost impact proposals to assure the continuing effectiveness of the system. The auditor should report exceptions to the cost impact proposal evaluation listing. For smaller contractors the auditor should test the listing of CAS-covered contracts against FAO files of active cost reimbursable contracts and listings of CAS-covered fixed-price procurement actions available within DOD.¹⁰

In addition, the Contract Administration Report (CAR) presently tracks the status, and specifically identifies the presence of the CAS Contract Clause, of every prime contract administered by the DCAS Region, by contractor, on a monthly basis.¹¹

Difficulties remain in the DOD solution to the GAO discovered problem of identification of the CAS Contract Universe. DOD requires PCO's to pass a contract to the appropriate contract administration activity for CAS matters even if the buying activity retains the other administration

⁹ DOD CAS Working Group Item 77-17 of 14 June 1977.

¹⁰ DCAM L-301(g).

¹¹ DLAM A-100.

responsibilities.¹² One interviewee claimed that this directive was frequently ignored. Non-DOD federal agencies with CAS applicability frequently award covered contracts to contractors who also perform DOD covered contracts. Thus, the DCAS ACO will not be aware of the presence of non-DOD covered contracts in the contractor's plant unless CAS administration authority is specifically delegated to him. Finally, no reliable system to make the ACO aware of covered subcontracts affected by a contractor's CAP change exists. After unsuccessfully attempting to require cognizant ACO notification by the subcontractor, the prime contractor is now required by the CAS Administration Clause to notify the ACO when the CAS Contract Clause is flowed down to a subcontractor.¹³ DCAS field personnel interviewed do not believe this is working well either. Therefore, it is not presently possible for DCAS or DCAA personnel to independently verify or catalog the CAS Contract Universe at a contractor's plant. As a result, inordinate reliance must be placed on the contractor's system for identifying covered contracts affected by a change in CAP's. Responding to a question concerning the success of the Working Group solution, a DOD official stated:

¹²DAR 3-1208(a).

¹³DAR 7-104.83(b), section (e).

Some contractors have good systems; some do not! As a result, we presently have no assurance that the contract universe is accurately represented in the CIP. But we don't have a better answer.

2. Lack of Contractor Cooperation

In addition to requiring the contractor to identify the CAS Contract Universe, the CAS Administration Clause requires the contractor to submit both the statement of general dollar magnitude and, after an appropriate period of review, the cost impact proposal in the form and manner specified by the ACO. Not infrequently, a contractor disagrees with an ACO determination made in the course of the cost impact assessment process and ceases to comply with further requirements of the CAS Administration Clause. Some reasons for, and the impact of, this willful lack of cooperation need to be considered.

a. Contractor Noncompliance

Disagreement with any of the number of determinations made by the ACO may lead the contractor to noncomply with provisions of the CAS Administration Clause. A determination on an auditor's charge of CAS noncompliance, on the interpretation of a new Standard, on the desirability of a voluntary change, on the materiality of an allocation shift, on increased costs or on a contract price adjustment may lead to heated debate and, in some cases, a formal dispute that stops the assessment process. One industrial association representative interviewed claimed that the nature and volume of supporting cost detail required by the ACO was frequently a sticking point in the submission of a CIP:

Contractors will seldom flat out refuse to submit a CIP. Instead, they will argue whether one is necessary or whether the detail the ACO asks for isn't too exacting. Generally, no matter what the size or materiality of the cost impact, ACO's will ask for the same amount of detail and data.

A Government respondent agreed with this contention, admitting "We ask for too much [supporting data and detail]---[we believe] more is better, whether we can use it or not!" Another Government official interviewed, however, disagreed:

One problem the Working Group considered, but rejected, was why not limit what the ACO's can ask for. But, so far, there is no need to do that. No one has proved to the Working Group that ACO's are requesting an inordinate or unreasonable amount of data. I've heard no examples of ACO's going off the deep end.

For whatever reason, some contractors have often stymied the cost impact assessment process by refusing to accede to the ACO's requests for proposals or data. This inability to resolve an issue may affect proposals in process, imminent awards or final settlement of completed contracts. The primary effect, however, of contractor defiance of the Clause provisions, is the stipulation that the ACO and auditor assess cost impact.

b. Independent Assessment of Cost Impact

The feasibility of an independent Government assessment of cost impact was a point of discussion during each of the research interviews. Generally, Government personnel were confident that the auditor had the information and access to records necessary to perform the task; several contractor's representatives felt they did not. At issue was

the availability of budgetary data and information concerning the contractor's commercial sales base, each important to the prospective pricing needed for a precise cost impact assessment. If the contractor has forward pricing rate agreements (FPRA's), this information is accessible to the Government. Lacking FPRA's, many of those interviewed in the private sector felt they could successfully withhold commercial and budgetary data from the scrutiny of Government auditors. But the inability of Government representatives to independently catalog the CAS Contract Universe is another deficiency.

c. Attempts at Solution

Two distinctly different strategies to induce the contractor to collaborate in the cost impact assessment process after an initial refusal to comply have been identified.

Many Government personnel interviewed believed an independent assessment that deliberately overstates the cost impact of the change and the impending downward contract price adjustment will force the contractor to submit his own proposal, supported by data formerly withheld from the Government, to refute the auditor's estimate and head off a unilateral determination. But one DOD official reported that this "estimate it high" tactic had backfired, relating an ASBCA decision on a contractor's dispute of the ACO's liberal independent assessment. In this case, the Board failed to find a strict accounting basis for the Government's determination

of quantum and decided in favor of the contractor. The same official recommended that the CAS Administration Clause be amended to give the Government rights similar to those specified in the Termination for Convenience of the Government Clause:

(c)...Upon failure of the Contractor to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to him, the amount, if any, due the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined...

(g)...if the Contractor has failed to submit his claim within the time provided in paragraph (c)...hereof, and has failed to request extension of such time, he shall have no right of appeal.¹⁴

Instead of eliminating the right to dispute the Government's independent assessment, a DCAS proposal to amend the CAS Administration Clause would give the Government, many officials believe, the "hammer" necessary to force compliance with the Clause. As recommended by DCAS, the change would provide:

If an adequate [cost impact] proposal is not provided within the specified time, or any extension thereto granted by the cognizant Contracting Officer, an amount not to exceed 10% of each subsequent payment request may be withheld until such time as a proposal has been provided in the form and manner specified by the cognizant Contracting Officer.¹⁵

¹⁴DAR 7-103.21.

¹⁵DLA-ACA Memorandum for the Director, DAR Council, DAR Case 78-400-9, 21 March 1980, p. A-2.

The heated reactions of the industry personnel interviewed to the proposed amendment seem to indicate it would be effective. One respondent, however, was not pleased with the Government intention:

Solving problems via contract clauses and actions contributes to the adversary relationship between Government and industry. We should try to solve them via the give and take of negotiations, recognizing that there's some right and wrong on both sides.

3. Problems in Roles and Relationships

A brief discussion of the roles of the Government players in CAS Administration was presented in Chapter Three in an attempt to situate each member in the process. Much is left to be said, however, on the relationship of each principal to the ACO, the central Government representative in CAS matters, and on the role of the ACO as a factor in, or hindrance to, the efficient conduct of cost impact assessment.

a. ACO-PCO Relationship

Lamm's dissertation argued that the inception of CAS strengthened the ACO's position in the procurement process, relative to the PCO.¹⁶ Five years later, the average PCO has resigned from the consideration of CAS administrative matters, both in deference to the ACO's decision-making role, acknowledged by regulation, and by personal preference. The PCO's involvement in the present CAS environment is limited

¹⁶David V. Lamm, "Administration of CAS," p. 280.

to a perfunctory invitation to attend the negotiation of larger contract price adjustments. In fact, most PCO's have limited their post-award interest in CAS to matters that threaten the stable funding profile of the contract. This resignation is unfortunate; the PCO is in a position of unique leverage in his relationship with the contractor that can be used to assist the ACO in persuading or compelling the contractor to comply with the CAS Administration Clause. One CAS Specialist interviewed reported that his region had been particularly successful eliciting CAS administration support from PCO's.

b. ACO-Auditor Relationship

Much has been written on the overwhelming influence of the DCAA auditor on the ACO's actions in CAS administration matters. Lamm acknowledged contractor's claims that auditors, not ACO's, were making the important CAS decisions.¹⁷ A Logistics Management Institute report, commissioned by the Working Group, asserted that ACO's were overly reliant upon the auditors' recommendations.¹⁸ Each of the private sector representatives interviewed decried the power of the DCAA auditor in CAS matters.

¹⁷ Ibid, p. 258.

¹⁸ Logistics Management Institute, "Administration of Cost Accounting Standards," January 1979, p. iii.

It is not surprising that auditors are criticized for their roles in CAS administration. They bear the responsibility of advising the ACO on every aspect of the acceptability and compliance of the covered contractor's cost accounting system. DCAA personnel are therefore required to be the resident Government experts in CAS matters, a role that runs the gamut from routine audit responsibilities to field interpretation of CAS mandates. As the principal CAS advisors, they are bearers of the bad tidings of noncompliance in the eyes of the contractor. One could hardly imagine a Government role more highly characterized by, and contributory to, industry-Government dissent.

One must search further, however, for the rationale behind charges levied against DCAA auditors in CAS administration. No complaints of substance are made of the auditor's traditional attest, assure and advise roles. Instead, industry personnel interviewed specifically objected to the influence auditors were capable of wielding over the ACO's determinations. One contractor's representative reported:

We had a situation where our change methodology was agreed to in writing by the ACO. Shortly thereafter, the DCAA resident auditor started second-guessing the methodology. And [he] disagreed with it and pressured the ACO to withdraw the agreement. Thus, as the LMI study pointed out, [ACO's are] afraid to disagree with DCAA...

The "influence" auditors can bring to bear on an ACO's determination is a matter of some debate. Some Government auditors and ex-auditors interviewed argued that CAS has

traditionally and rightfully been the sole province of DCAA. Several expressed a concern that an ACO's "reasonable" determination, made after rejecting the auditor's advice and accepting the position of the contractor, could result in a wrong-headed interpretation of a Standard, bringing about effects unintended by the CASB, that, in turn, would lead to a dangerous, detrimental precedent in future CAS disputes. One Government commentator even suggested that the ACO should simply make the auditor's recommendation his determination and force the contractor to challenge the issue at the Board of Contract Appeals.

But many respondents saw the proper ACO-auditor relationship differently. In reaction to the suggestion that the ACO indiscriminately accept the auditor's finding, a former Government accountant argued:

There is real danger if, in any procurement action, the ACO takes somebody else's evaluation at face value. It happens---probably due to the ACO's constraints on time and talent. But it's bad business unless there is some real basis in which we can say the auditor's word is well reasoned and logical. There are too many variations in auditors and their points of view. They all have built-in biases and blind spots. By their very training, they like to hold firm to principles and to certain ideas they have about how things ought to be done. They see things as black or white and are very uncomfortable with any position in the middle, where CAS issues tend to fall.

Dave Lamm suggested that "...auditors make very narrow, conservative and strict interpretations of Standards" and that "...the auditor [is]...an additional force [for the ACO] to contend with."¹⁹ This discussion is not intended to denigrate

¹⁹ David V. Lamm, "Administration of CAS," pp. 250-252.

the value of the auditor's recommendations, but to argue that the auditor reaches his position from an accounting point of view, unbalanced by the other considerations the ACO must weigh before he makes a business decision. Thus, the auditor's decision cannot always be assumed to be the best one.

The "pressure" an auditor can exert on an ACO's determination is evident. DCAA recommends to its auditors:

...we have some means available to challenge ACO decisions...

If the ACO is not responsive to the audit recommendations, contact the regional CAS monitor for assistance. If appropriate, the FAO manager, acting together with the regional CAS monitor, should attempt to influence the... agency... If that support is still not requested, and its absence could adversely affect the Government's interests, the issue should immediately be referred to Headquarters for appropriate action.²⁰

DCAA has established a network, within its organization, to collect the reports of field auditors who believe ACO's have made inadequate determinations, contrary to the recommendations made by the auditor. Issues that are believed to be significant are discussed and resolved between DCAS and DCAA headquarters. There is no evidence, however, that the determination of any ACO has been overturned as a result of this liaison. This network, however, is very similar to that formed in response to a 1969 GAO recommendation, requiring DCAA to report to the Office of the Assistant Secretary of

²⁰DCAA, "Cost Impact Proposals and Contract Price Adjustments," Advanced Cost Accounting Standards, pp. 18-19.

Defense (Installations and Logistics) any cases where the contracting officer failed to abide by the auditor's advice. The practice was eliminated after David Packard, then Deputy Secretary of Defense, questioned its propriety:

We should avoid actions by auditors in their advisory capacity which appear to dispute or question specific decisions of the contracting officer. The escalation of possible disputes²¹ relative to specific decisions should be avoided.

In 1979, DCAA proposed the adoption of a DCAA Form 2 that would bring to the auditor's recommendations on CAS and overhead matters much the same "determination" quality currently vested in the DCAA Form 1 for unallowable and unallocable costs. Ostensibly, the proposal was aimed at streamlining the cost impact assessment process, allowing the contractor 60 days to appeal the auditor's determination before it became a final and binding decision of the ACO. Each of the military services and DLA were adamantly opposed to the proposal, claiming it would usurp and undermine the decision-making authority of the ACO. As a result of the resistance, DOD failed to adopt the proposal. The attempt, however, is emblematic of the problematic ACO-auditor relationship in CAS matters.

²¹DSD Memo to ASD(C) and ASD (I&L), "Role of the Defense Contract Auditor," 9 October 1970.

c. ACO-Price Analyst Relationship

The relationship between the ACO and price analyst is one new to CAS matters. Traditionally, price analysts were assumed by many field personnel to be incapable of comprehending the complex accounting issues of CAS, given their lack of accounting background. But DCAS policy, one interviewee stated, identified the price analyst as the intermediary in all financial matters between the ACO and the auditor. A Government official explained:

We've always felt CAS was a field pricing team effort. But practice was not married to policy [in the case of the price analysts].

As a result of the latest DLAM change, the price analyst's duties are very similar to those performed by the auditor. Some Government personnel interviewed believed that this move was made to provide the ACO team support and a more balanced viewpoint, from which he might not benefit when the auditor is his sole CAS advisor. One supporter of the change explained:

...with the third change to DLAM, we have created a role for the Price Analyst. We had to get the pricers to recognize their obligations in this area. The ACO should not be all alone [in CAS matters]. He should be able to get assistance from his team.

It is the opinion of this researcher that the DCAS intent behind the new role for the price analyst is a recognition that the ACO needs the additional leverage of a team assistant, responsible to him, to counterbalance the power wielded by the auditor. One ex-auditor interviewed, however, felt the

change would hinder more than help the ACO determination:

That the ACO needs a member of his own staff to evaluate the auditor's submission I don't understand...The accounting review is then duplicated. Why? This creates a variance in advice to the ACO. Not that the ACO does not have a right to question the reliability and conclusions of any of his advisors---including the auditor. But I am mystified as to why we have built a system that gives the ACO an inherent ability to challenge the auditor.

The effect of the new role assumed by the price analyst on the ACO-auditor relationship will have to be assessed in the future. Obviously, however, the pressure and influence formerly exerted by the auditor in CAS matters will be challenged.

d. The ACO Role

Any review of the roles and relationships of Government personnel in the CAS process must ultimately concentrate on the principal Government figure in Cost Accounting Standards issues, the ACO. Both the roles established by DOD regulations and those assumed by him in the field deserve consideration. During the course of this study, four ACO roles in CAS administration were identified: principal Government representative, CAS generalist, decision-maker and adjudicator. Each role will be explored.

(1) Principal Government Representative. Since the inception of CAS, DOD has developed and implemented the role of the ACO as the single face to industry in Cost Accounting Standards issues.²² This is the same concept utilized in all

²²DAR 3-1208(a).

contract administration activity: the assignment of a single cognizant ACO to each contractor facility. As the sole Government representative in CAS matters, the ACO becomes the focal point for contractor-requested interpretations and determinations. One auditor interviewed argued that when the ACO assumes the other roles, he frequently forgets his primary role as representative of the Government, and, ultimately as advocate of the Government's interests. Other roles, as decision-maker or adjudicator, should remain secondary, the auditor claimed.

(2) CAS Generalist. DAR 1-406 lists 69 duties that the ACO is responsible for shouldering. Obviously, it is not intended that the ACO be a specialist in each field necessary to carry out his duties. DOD has created the concept of the contract administration team. Under this aegis, the ACO can benefit from the technical advice of many of specialists, in law, engineering, quality assurance, cost/price analysis, and the recommendations of the auditor. As a result, the ACO need only be a generalist, with a working knowledge of the technical fields, but privy to and reliant upon the recommendations of specialists:

The concept of a contracting officer that underlies many DAR policies and procedures is that of a specialist in the fundamental...and procedural requirements of contracting and a generalist in most of the other disciplines involved in the acquisition process. Under this prevailing concept

a contracting officer is a manager, a problem solver, a person who accepts responsibility and gets things done by marshalling the resources of the organization.²³

One recent study asserted that more than a general knowledge of CAS and cost accounting on the part of the ACO was necessary in view of the complex and controversial issues the ACO was required to address: "Only a relatively few ACO's have the time and background to perform CAS administration adequately."²⁴ The DOD CAS Working Group came to the same conclusion in an earlier field survey:

Ideally, all contracting officers should be capable of understanding CAS problems and making their own decisions based on that knowledge. However, it does not appear that DOD procurement organizations require ACO's to have a background in accounting. Informal discussions with personnel who teach the CAS workshop at ALMC indicate that a number of ACO's attending that course have been unable to understand the complex accounting which is inherent in CAS. Under these circumstances it cannot be expected that many ACO's will be able to deal with CAS unless they are first taught the fundamentals of accounting.²⁵

One ex-Government official interviewed agreed that CAS issues placed an undue burden on the ACO:

The role of the ACO as a generalist---DOD clings to this concept. But it isn't fair to him that they put him in this position and don't give him the education, training and tools necessary to make sound business decisions. Otherwise, he's in the business of accepting whatever various specialists give him. The Government is not getting their money's worth and he is not doing his job. He's just a figurehead.

²³LMI, "Administration of CAS," p. 3-2.

²⁴Ibid.

²⁵DOD CAS Working Group, Field Survey, July-August 1977, p. 23.

Several industry representatives charged, and a few Government personnel admitted, that the average ACO was sadly deficient in the fields of accounting necessary to understand CAS Rules, Regulations and Standards and the implications of DAR implementing regulations, in their present form. If one accepts this view, the allegation that ACO's are overly reliant upon the auditor's recommendations rings true.

(3) Decision-Maker. In its investigation of the role of the contracting officer, the Commission on Government Procurement recommended:

Clarify the role of the contracting officer as the focal point for making or obtaining a final decision on a procurement. Allow the contracting officer wide latitude for the exercise of business judgment in representing the Government's interest.²⁶

The preceding Chapter's model of CAS administration graphically portrayed the numerous decision points in the process whereupon the ACO is called to make a determination. In recognition of this, the Working Group calls for sound decision-making by ACO's:

Contracting Officers are...charged with exercising their best judgment on each individual impact study in a way that protects the best interest of the Government and considers the equity, fairness and materiality of the matter.²⁷

The ACO, as a generalist and manager of personnel assets with technical knowledge, is in the unique

²⁶As cited in "Administration of CAS," David V. Lamm, p. 297.

²⁷DOD CAS Working Group Item 76-8 of 17 December 1976.

position necessary to be the Government decision-maker. He is able to consider viewpoints of legal, accounting and engineering specialists, weigh the inherent biases of each position, and make an independent business decision for which he is held accountable. This accountability generally insures the Government against arbitrary and capricious determinations. The decision will have to equally consider both interest of the Government and equity for the contractor. For these reasons, it is generally acknowledged that no alternate member of the contract administration team is capable of making the type of decision required. In a letter to the Director, DCAA, Rear Admiral Gerald T. Thompson recognized this truism:

I appreciate that the auditor may not always agree with the contracting officer as to the basis for...[contract price] adjustments. However, the integrity of the entire acquisition process rests on the fact that advice received from the contract auditor, CAS specialists, attorneys, and others is advisory in nature, and that one individual, the contracting officer, has responsibility for the final decision.²⁸

Admiral Thompson's sentiments echoes those expressed by Secretary Packard nine years earlier:

Nevertheless, contracting officers' decisions on matters of contract pricing have to take into account many factors in addition to those presented by the auditors. It is, therefore, necessary that all those responsible for furnishing support to the contracting officer understand the role they should play.²⁹

²⁸RADM Gerald T. Thompson, Deputy Director, DLA (CAS) letter to Frederick Neuman, Director, DCAA of 27 August 1979.

²⁹DSD Memo, "Role of the Defense Contract Auditor," 9 October 1970.

Yet, Cost Accounting Standards issues present special challenges to the ACO as decision-maker. His actions are scrutinized closely by the DCAA auditor, DCASR CAS Specialist and the CAS Board of Review. Each possesses the power and influence to bring special pressures to bear on the final determination. One Government official even indicated that he was capable of threatening an ACO's contracting officer's warrant if the ACO "stubbornly" held to a decision the Board of Review failed to ratify. This example does not reflect official DOD policy, but it is illustrative of the environment within which the ACO must make a CAS determination. This environment is perceived by the contractor and examples of it were often cited during the interviews as the primary obstacle to the efficient conduct of the cost impact assessment process:

The issue has always been that the ACO looks to other people to make the decision. He should have absolute authority and enough confidence in himself, or in the system to support him, so that he will know his decision will stick. So it's a two-pronged attack that is needed--- he needs both technical and political support. The fact is that CAS has introduced a paranoia into contract administration.

(4) Adjudicator. As a subset of his decision-making role, the ACO assumes the role of adjudicator when a contractor initially submits an appeal of a final determination. In this role, where the contractor receives the first hearing of his dispute, the ACO must weigh the contractor's position carefully against that of the Government. He is

called upon to be a judge, not a Government advocate, and impartially reach an equitable finding. Frequently, this requires him to hear the contractor's argument and the argument of one of his own advisors. He must consider each opinion and the facts presented by each side in light of the other's position. The ACO, as the contractor's court of first resort, must, above all, be judicious.

Because of the propensity of auditors and contractors to line up on opposite sides of CAS issues, the ACO frequently finds his role as adjudicator in conflict with his role as primary Government representative. Some Government officials interviewed felt that the ACO could not or should not perform his adjudication role in CAS issues if it meant that a finding would be issued in favor of the contractor and contrary to the auditor's advisory opinion. Typical of these remarks are those made by a DOD policy-maker:

If the ACO is acting as an intermediary between the contractor and the auditor in CAS matters, he's assumed the wrong role.

The same respondents were in favor of settling CAS disputes in the ASBCA, bypassing the ACO.

e. Summary

The roles and relationships assumed by Government personnel in CAS administration and therefore, in cost impact assessment, complicate and confuse the process. Contractors are intimately aware of the conflicts and may be able to take advantage of the dissension. Government bargaining power is

threatened when a contractor is aware that members of the contract administration team are split on the issues. Both the ACO and auditor are placed in difficult positions and the credibility of each is threatened when the conflict becomes known.

4. Sketchy and Inadequate Guidance

The greater portion of Chapter Three served to illustrate the paucity of unified guidance, elaborations or illustrations necessary to supplement CASB mandates and DAR. The ACO and auditor are too often provided little, or no, substantive direction in the daily procedures to be followed in administering a covered contract. The guidance available in Working Group papers is administered rigidly and not accepted as advisory. Left to fend for themselves, both ACO and auditor are forced to make their own interpretations of field problems experienced or delay the execution of the cost impact assessment process in anticipation of direction from Headquarters or besieged CAS monitors and specialists. Each of these contentions is based upon repeated assertions from the variety of industry representatives interviewed.

But the lack of agency guidance has been an issue for over five years. In his doctoral dissertation, Lamm recommended the establishment of a CAS administration policy that would consider all aspects of the cost impact assessment process.³⁰ The 1976 GAO report recommended:

³⁰David V. Lamm, "Administration of CAS," p. 311.

...that the Secretary of Defense direct the Cost Accounting Standards Steering Committee and Working Group...[to]... formulate uniform procedures and requirements relative to identifying the universe of covered contracts affected by a cost impact proposal; preparing cost impact proposals, including the extent of supporting data required; and measuring increased cost.³¹

The Working Group has responded fully to the first recommendation only and briefly noted the existence of two alternate pricing methodologies, providing only general direction on their appropriateness to various situations. The LMI study recommended the consideration of the publication of a CAS administration manual to answer the need for more guidance.³² The Working Group rejected this recommendation.

Confusion over issues, both basis and specialized, vital to proper CAS administration, exists in abundance. One comment, typical in the interviews of both Government and industry personnel, was made by a contract auditor:

There is a void in guidance, set-up and form as to the CIP. There is no general agreement on how to calculate cost impact. Perhaps it's because we've concentrated on adequacy and compliance reviews. Nonetheless, cost impact assessment has been generally overlooked and the sparse guidance that does exist is not clear.

This section of the Chapter will briefly enumerate some of the issues that confuse or compound the process. Some solutions to the issues will be recommended in Chapter Five.

³¹GAO PSAD 76-154, p. 26.

³²LMI, "Administration of CAS," p. 4-3.

It is the purpose of this section to illustrate the types of issues that require additional DOD policy and guidance.

a. The Statement of General Dollar Magnitude

Information required on the statement of general dollar magnitude, as it is currently structured, has not been considered useful to the cost impact assessment process. As evidenced in Chapter Three, DAR allows no materiality determination to be made as a result of the general dollar magnitude statement; the ACO is required to pursue the cost impact proposal.

In recognition of the statement's seeming lack of usefulness, DCAA has proposed a change to DAR that would require the net cost increases and net cost decreases to be specified by type of contract.³³ As a result of this reorganized initial stage of the two-stage impact assessment proposal, the ACO would be authorized to determine the materiality or immateriality of the allocation shift and, if the impact is immaterial, stop the process without the requirement of a CIP.

The computation of accounting information required to assemble the statement of general dollar magnitude, even in the revised form proposed, remains as extensive as that required for a cost impact proposal by contract. Granted, the

³³DCAA PCD/H6 Memorandum for Chairman, DAR Council, OUSD (R & E), of 11 March 1980.

new format would provide increased visibility by type of contract, thereby eliminating any confusion engendered by the opposing definitions of increased cost in firm and flexibly priced contracts. It would, however, remain a laborious assessment for the contractor. Other options for an aggregate study of cost impact are possible that are easier to perform. These options will be discussed in the succeeding chapter.

b. Materiality

As discussed above, materiality determinations can presently be made only after a contract-by-contract study under current DAR requirements. In Chapter Five, concurrent with the discussion of the aggregate impact assessment study, scenarios will be offered where a materiality determination can be made without the necessity of either a statement of general dollar magnitude or a cost impact proposal. These examples deserve DOD consideration and official sanction.

c. Certification of CIP Cost or Pricing Data

Interview respondents were at variance over the requirement for contractor certification of cost or pricing data to support CIP's. This issue will be discussed in the following Chapter.

d. Sampling

Legitimate, valid, sampling techniques are recognized as useful tools in both forward pricing and auditing. It is the opinion of this researcher that these techniques would prove to be similarly useful for cost impact assessment.

Some suggestions and general guidelines are needed for their use when a CAP change affects a multitude of contracts.

e. Simultaneous CAP Changes

The DCAA prohibition on the presentation or consideration of simultaneous accounting changes contained within their Training Guide presents problems. As Hal Sharp notes, attempting to artificially separate changes that are made simultaneously to allow ease of audit in turn creates conceptual problems:

It would be unusual that a contractor would only contemplate a single accounting change each year. The CASB has been promulgating about three or four new standards each year, all of which might not impact the contractor....Although it would be "nice" to have a detailed proposal for each accounting change, it would be impractical and not produce any more accurate results in the end. Technically, multiple accounting changes become a "chicken and egg" situation, as to which change came first, the standard or the voluntary. If changes were made one at a time, instead of all at the beginning of a fiscal year, then the first change would create a different accounting base for the second change, etc.³⁴

Substantive guidance is needed to assist ACO's and auditors in dealing with simultaneous changes in CAP's and the computation of cost impact in this situation. The recommendation contained within the DCAA Training Guide, to demand individual CIP's for each accounting change, is not realistic.

³⁴Procurement Associates, Inc., Cost Accounting Standards, p. XIII-30.

f. CIP Format

Any substantive guidance on the format presentation of the contractor's CIP submission that would facilitate the audit and consideration of contract price adjustments would be extremely helpful to field administrators. One auditor complained during an interview that he could frequently not tell "what the amounts listed mean" when he received the CIP. The Working Group survey concluded that:

Cost impact proposals vary greatly as to format and detail. ACO's and auditors are not consistent in their requirements.³⁵

g. Pricing Methodology Confusion

A major portion of this Chapter was devoted to an exploration of the two basic pricing methodologies and the variants thereof for assessment of cost impact. As shown, some methods are appropriate in some accounting change scenarios and others inappropriate; some variants might provide a more equitable method than others under given circumstances. A need for further guidance seems to be indicated.

h. Other Problems

Several other issues, not included in the enumeration above, including profit adjustment, restructuring of incentive criteria and the timing of contract price adjustments, deserve consideration. Research indicates that attempts to

³⁵DOD CAS Working Group Field Survey, p. 27.

develop guidance for field personnel is ongoing at the DCAA and DCAS regional levels, usually under the auspices of issuances of the CAS monitors and specialists. Much of the regional instruction seemed, to this researcher, to represent solid, sincere efforts to provide unified and useful assistance to personnel required to administer covered contracts on a daily basis. DOD policy-making officials interviewed, however, claimed that a similar headquarters project to produce a CAS administration manual is infeasible. The variety of situations possible, with as many contractors in as many locations, it was argued, does not lend itself to a headquarters solution. It is the opinion of this researcher that the successful regional guidance attempts and DOD element headquarters' refusal to undertake a broader based approach to more substantive direction to CAS administration are in contradiction.

More extensive guidance, not regulation, may be needed on the assessment of cost impact. A CAS administration manual, stressing flexibility and equity and the variety of solutions available to problems that confound the process, free of accounting jargon, seems both feasible and desirable. An attempt to provide general guidelines on the CIP and impact assessment will form the basis of Chapter Five. As a result, it will be shown that a structured approach can serve to simplify cost impact assessment and improve decision-making.

C. SUMMARY

It was the intention of this Chapter to review those problems that exist in the CAS administration environment that actually hinder the cost impact assessment process. In the course of this review, confusion over, or misapplication of, the pricing methodologies, procedural and conceptual problems, including the roles and relationships of Government players, and the lack of guidance on specific issues, were identified as hindrances to the efficient conduct of cost impact assessment. Some possible solutions to the obstacles were presented; some procedural guidelines for ACO's will be recommended in Chapter Five.

The complexity and confusion of Cost Accounting Standards administration leads to attitudinal problems among affected personnel, both in industry and Government. Though outright refusal to comply with the regulations provided was not discovered during the course of the research, some hostility and resistance to CAS was noted among industry and Government personnel. These attitudes were manifested in frequent examples of failures to drive the cost impact assessment process through to conclusion.

One industry representative interviewed cited a specific case where the impact assessment cycle was over 600 days long, only to have the ACO determine the issue immaterial at the end of that time. Two individuals, one Government and one industry, complained of separate cost impact cases that had

been outstanding since 1977 and were still awaiting resolution. A 1977 GAO follow-up report of DCAS administrative efforts audited 37 cases selected at random and was critical of the delays in settlement of 12:

We believe there is a need to emphasize the importance of prompt action by contracting officers in settling noncompliance cases. Protracted settlements usually involve excessive investments of time by contractor and agency officials and adversely affect the relationship between contracting parties.³⁶

The delays experienced, and their causes, were the subject of each interview conducted. Industry and Government personnel cited a variety of reasons to explain the lack of timeliness, from "vacillation preventing an ACO final determination," to "the bureaucratic procedures of separate DCAS/DCAA channels," to "contractor refusal to cooperate." It is the opinion of this researcher that the problems currently existing as a result of CAS implementing regulations, and the environment within which covered contracts are administered, directly and indirectly contribute to delays in the cost impact assessment cycle.

The effects of outstanding, unsettled CAS issues confound the procurement process. While changes to CAP's are being scrutinized, the contractor is unable to confidently price future proposals. Forward pricing rate agreements (FPRA's) cannot be entered into and savings and reserve clauses are

³⁶GAO Report PSAD-77-158 of 17 August 1977, p. 3.

attached to the contracts, forcing later resolution of the issues. As the process drags on, accounting information in the CIP may become old and invalid, or harder to identify and substantiate. Finally, while impact is being assessed, individual contracts may close out and funding for subsequent adjustments may disappear. A change in cost accounting practices inherently introduces turmoil into contract accounting and pricing. If the Government allows its administrative actions to inhibit quick settlement of the change issue, the turmoil will inevitably affect the procurement process itself.

The ACO should be reestablished as the dominant decision-maker in CAS matters and other members of the procurement and administration team must offer him their undivided support. A better system of tracking the CAS Contract Universe should be sought. A guidance manual on common CAS administration problems and cost impact pricing methodologies could be developed that will simplify the process, remove the present confusion and enhance the ACO's decision-making abilities. Chapter Five will present one example of a response to the latter two needs.

V. A METHODOLOGY FOR COST IMPACT ASSESSMENT

Chapter Three presented an in depth review of Cost Accounting Standards administration and the environment within which cost impact assessment of cost accounting practice changes is performed. That Chapter also detailed the regulations and guidance published that govern the process. Chapter Four analyzed the cost impact pricing methodologies, and their appropriateness in varying circumstances, and the problems that hinder cost impact assessment created by insufficient direction available to the ACO and auditor and the rigidity with which the dearth of DOD CAS administration guidance is implemented. In Chapter Four, it was suggested that a unified set of sequential procedures, promulgated and understood to be advisory only, would be helpful in guiding the ACO and auditor through a coordinated assessment of cost impact on covered contracts. This Chapter will present one example of such a set of general guidelines.

It is the purpose of this Chapter to offer a logical, efficient methodology for assessing the cost impact of changes in CAP's. The Chapter will review each stage of the process, describing the information needed and the decision-making that can proceed therefrom. The methodology will provide for a partial solution to difficulties experienced as a result of a lack of contractor cooperation. A range of assessment

methodologies, much wider than presently available or proposed, to measure cost impact on the CAS Contract Universe, will also be recommended. In general, this Chapter will construct a framework that will allow the complex issue of cost impact assessment to be considered in a series of manageable, finite, activities in order to improve ACO comprehension and decision-making ability and the timeliness of Government administration of the process.

A. THE RATIONALE FOR A NEW METHODOLOGY

Chapter Four presented the basic arguments for the need for additional agency-wide guidance in cost impact assessment. It would be helpful, however, before introducing a methodology that would represent the most wide-ranging CAS guidance promulgated by DOD, to briefly review three major arguments.

ACO's are not accountants, nor need they be. Despite LMI's recommendations that DOD undertake an intensive effort to educate its ACO's to increase their accounting competence,¹ no major retraining process is necessary in the opinion of this researcher. An effort is necessary, however, to simplify and facilitate CAS administration issues, that will enable ACO's, with a requisite, fundamental knowledge of financial and cost accounting, to become intelligent consumers of the

¹LMI, "Administration of CAS," p.4-2.

advice of CAS specialists, auditors and price analysts. Such a move would allow the ACO to retain the traditional role of CAS generalist, while maintaining, or regaining, the role of CAS decision-maker.

Industry officials interviewed frequently posed a common question: "What is the Government buying, a weapons system or an accounting system?" While legitimate needs for Cost Accounting Standards in the defense procurement environment were established in Chapter Two, it is vital that the manner in which the Rules, Regulations and Standards are implemented and administered not stymie or impede the procurement process. Evidence of the delays, and ramifications of the delays, currently experienced in CAP change administration were presented in Chapter Four. An orderly procedure, that lends itself to prompt execution, expedient dismissal of immaterial issues, and timely resolution, is needed to combat the industry perception that CAS is more important than the procurement it regulates.

Chapter Four's discussion of cost impact pricing methodologies demonstrated that certain methodologies, and variants thereof, might be more feasible and equitable than others under differing circumstances. Chapter Four also suggested that simpler tests for cost impact materiality might be possible than are presently permissible or proposed. During the course of the research, however, it was discovered that the minimal guidance available to ACO's and auditors on the assessment of cost impact was enforced with the same

rigidity as the CAS mandates themselves. It is the opinion of this researcher that DOD administration guidance should be characterized by flexibility and adaptability that encourages the ACO to use his discretion, with the best interest of the Government in mind, in considering the feasibility and equity of the cost impact assessment process chosen. As indicated by one industry representative, present DOD regulations fall short of this goal:

...people involved in this, DCAA and the ACO, have to be more open-minded and flexible and concentrate on the "prudent businessman" concept: what is appropriate; what makes sense. We have situations where Government people have said, "We agree with you, but we can't let you do that."

DOD guidance should present the pricing and assessment options, the shortcuts available, and the arguments for and against each. Such official sanction will allow the ACO to exercise flexibility in administering cost impact assessment in the manner most feasible, equitable and appropriate.

The balance of this Chapter, therefore, will be devoted to a recommendation of a new cost impact assessment methodology that recognizes and responds to the need for simplification, the need for expedient resolution and the need for flexibility in CAS administration.

B. QUALIFICATION OF THE CHANGE

Upon receipt of a contractor's proposal, or the discovery of a change in cost accounting practices, the Administrative Contracting Officer should begin preparations for the cost

impact assessment process. Continuing liaison with the contractor, the solicitation and collection of preliminary information and an advance agreement between the parties is necessary to insure that the impact assessment process will be executed and resolved smoothly after it is initiated. Effort expended in these early phases, devoted to the "qualification" of the CAP change, a period where it is analyzed and scheduled, where the population of potentially affected contracts is surveyed and where the pricing methodology appropriate to measure the effect is established, will serve to thoroughly prepare the ACO for the impending assessment of cost impact over the entire CAS Contract Universe. As stated by one auditor interviewed:

The ACO should come to the cost impact assessment with the same type of information he would gather prior to price negotiations on the performance of a contract change order.

1. The Substance of the Change

With the assistance of his CAS experts, the auditor and price analyst, the ACO should first come to a thorough understanding of the ramifications of the accounting change. Examples of change scenarios are offered below for illustration.

a. Accounting CAP Changes

Some changes result from continued refinement of the contractor's cost accounting system.

(1) A Shift From Indirect to Direct. A contractor who reclassifies costs to switch elements of an indirect cost

pool to direct costs may alter the direct loadings on covered contracts, reduce the level of costs in, and the allocation rate of, the pool from which the costs were shifted, and possibly increase the allocation to the covered contracts of any cost pool which utilizes as a base the newly-designated direct costs.

(2) Changes in Allocation Bases. A CAP change that alters the manner in which an indirect cost pool is allocated could potentially increase or decrease the allocation rate utilized to burden covered contracts.

b. Organization CAP Changes

Other changes may result from internal reorganization of a service center, division or plant.

(1) Pool Reorganization. Any merger or split of organizational entities would lead to a similar merger or split of overhead pools associated with the entities. A larger or smaller cost pool would lead to a corresponding increase or reduction in allocation rates for the pool.

2. The Ripple Effect

Once the primary effect of the accounting change has been ascertained, the ACO must gain an understanding of the "ripple effects" of the change through the contractor's accounting system.

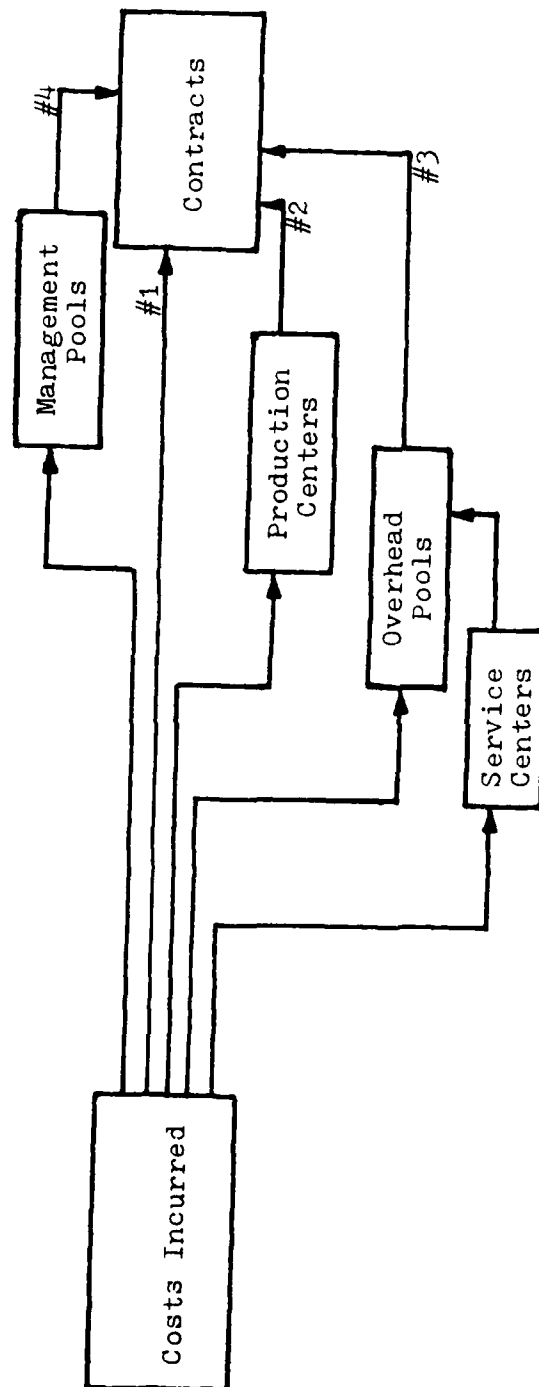
a. A Simplified Accounting System

In general, a simple rule suggested during one interview with a Government accountant can be utilized to

determine the nature of the ripple effect:

Is the cost [increased or decreased by the change] part of the base of some other allocation? If so, the impact of the change will continue to ripple down.

Figure 5-1 can be utilized to demonstrate the ripple effect. Accounting changes made to the sequence of cost allocation will have the greatest effect if the change is made at the beginning of the sequence, at the left in Figure 5-1, and the least effect if the change is made at the end, at the right in the Figure. Thus, a change in direct cost loading or measurement on a contract will change the allocation of direct cost, including the costs of a production center (sequence #1 and #2), the allocation of any overhead cost pool utilizing previously increased or decreased direct costs as a base (sequence #3), and the allocation of management pools (sequence #4) utilizing total cost impact as a base. A change in the allocation of costs to, or from, the management pools may only affect allocation of the pools to the contract (unless a cost has been diverted to or from the management pool from or to an earlier source in the sequence in which case the shift must be traced from the source). The resident auditor's assistance will be necessary for this analysis. A "roadmap" of the accounting system similar to that presented in Figure 5-1 may enhance the ACO's understanding of the change.



A SIMPLIFIED ACCOUNTING SYSTEM

(Showing the allocation sequence of costs to contracts)

FIGURE 5-1

3. Adequacy Determination and Compliance Advisory

Formal liaison by the ACO should be made with the contractor if any problems are encountered in determining conceptually the direct or indirect effects of the accounting change on the contractor's allocations of costs to covered contracts. Once this analysis is complete, the contractor's description of a voluntary or mandatory change must be translated into an amendment to keep the Disclosure Statement accurate, current and complete. An initial advisory opinion on the compliance of the change with Cost Accounting Standards should be requested from the auditor and the ACO, in concert with the auditor, should inform the contractor of preliminary findings. A change discovered or proposed that may result in a final noncompliance determination should be discussed by the parties. Modifications to the existing or future practices may be suggested by either contract party for the purpose of avoiding, or amending, a practice that is susceptible to a finding of noncompliance. Every effort should be made to resolve disagreement between parties.

4. Timing of the Change

If the contractor has proposed a change to existing practices, the impact assessment process should commence at least 180 days prior to implementation of the new practice. Hal Sharp suggests that a common understanding can be developed through negotiation of an advance agreement between parties in the intervening time period.

...Ideally it would be helpful if the Government and the contractor could agree...[tc]...a...proposal and negotiation process backing off about five to six months before the next fiscal year when the accounting changes would take place.²

A contractor's efforts to effect changes to his CAP's with less than sufficient advance notice to the Government should be resisted; proposals to implement new Standards should be sought at least six months prior to the required implementation date.

An advance agreement, or memorandum of understanding, should be initiated between parties that details the time frames of the change. This agreement must set forth the mutually acceptable implementation date of the mandatory or voluntary alteration in CAP's or the date when a questionable practice discovered by the Government could be modified if it is eventually found to be noncompliant. The agreement should also establish a cut-off point, concurrent with its execution of both parties, wherein the contractor agrees to introduce no further proposals for CAP changes until the issue in question is resolved. This action will prevent any further compounding of the cost baselines for each contract from which cost impact will be measured. If none exists, a commitment from the contractor to propose future changes for once a year implementation only may also be attainable. As one interviewee suggested:

²Procurement Associates, Cost Accounting Standards, p. XIII-12.

You have to be able to some way draw the line. For that reason you'll find that if you attempt to make accounting changes more than once a year, you're in deep trouble. Theoretically, CAS could be issued to be effected at any time. Normally, a voluntary change, unless there's a drastic change in conditions in a company's sales base, is generally implemented at the beginning of a fiscal year. So are the Standards, in general. So it's a lot better to establish a working rule that you back off three or four months. There will be no new changes after that (there could always be exceptions).

This "moratorium" should be, as suggested, 90-120 days prior to the implementation date of the new practices. The implementation date, ideally, should be concurrent with the beginning of the contractor's fiscal year.

5. CAS Contract Universe

As discussed in Chapter Four, the population of covered contracts potentially affected by the proposed or discovered change, or the CAS Contract Universe, cannot be identified independently at the contract administration office. Therefore, the contractor's cooperation in assessing the Contract Universe is essential.

The contractor should be requested to submit a schedule indicating the Contract Universe, by contract type, and listing the contract number, buying office, incentive or pricing structure, period of performance and costs incurred against the contract to date.³ The schedule may be verified

³ Ibid, p. XIII-14.

against the CAR or the contractor's existing system for tracking the CAS Contract Universe, if necessary. An understanding should be developed between parties that the production of this schedule will be to the benefit of each in the subsequent impact assessment, since it will allow a valid stratification of the Universe by the ACO and the selection of a representative sample of contracts for detailed cost impact assessment, which may enable an early materiality determination and/or preclude a detailed contract-by-contract impact assessment. The contractor should be informed that no materiality determination can, or will, be made without this information.

During the course of the research, an alternate system for tracking the CAS Contract Universe at individual contractor's plants was identified. The Federal Procurement Data System (FPDS), established on 3 February 1978 by the Office of Federal Procurement Policy to collect, develop and disseminate procurement information, could eventually be tapped by the ACO for a timely identification of covered contract populations. In its future form, FPDS would have to be much more reliable than it is presently.⁴ Additionally, information concerning covered subcontracts at a contractor's plant could not be gleaned from it. A workable, FPDS, however, would

⁴ GAO, "The Federal Procurement Data System---Making It Work Better," PSAD-80-33, 18 April 1980.

enable the ACO to identify all covered prime contracts open during a given time period, irrespective of Federal procuring agency and any specific delegation of administrative responsibilities.

6. Forward Pricing Rates

New forward pricing rates, or annualized billing rates, should be requested from the contractor that represent the implementation of the new practice proposed or amendment of the practice discovered. The contractor's proposal for forward pricing rates will identify the budgeted magnitude of indirect cost pools and commercial and Government sales base for the coming year. If FPRA's are not available that indicate intended indirect cost pool allocation rates before the change, information on the rates utilized should also be requested. The comparison of overhead rates before and after the change will prove useful for subsequent materiality determinations.

7. Final Compliance Determination

A final determination of the compliance of the new practice must be made by the ACO before the impact assessment process can proceed. It has been purposefully sequenced, however, to be made after information on the CAS Contract Universe and the effects of the change on overhead allocation rates has been received from the contractor. As a result, if the contractor determined to be in noncompliance refuses to cooperate further, the ACO should have acquired enough

information to enable the auditor to begin a valid independent assessment of impact. If delaying a final noncompliance determination until the requisite accounting proposals and CAS Contract Universe information is made available is unsuccessful, i.e., if the contractor refuses to provide details until a determination is made, the ACO may be threatened by the contractor's ability to frustrate the assessment by refusing to cooperate. Without a "hammer" to force compliance with the CAS Administration Clause, the methodology described herein will not appreciably enhance cost impact assessment. The balance of the procedures listed in this Chapter are detailed with the assumption that contractor cooperation can be won.

8. Negotiation of Pricing Methodology

Once the source of the CAP change has been identified, discussion between contract parties should commence in an effort to reach agreement on the most appropriate, i.e., most equitable and feasible, pricing methodology for the assessment of cost impact. Chapter Four's extensive discussion of the pricing methodologies and the generalities made at the conclusion of the discussion is summarized in Figure 5-2. In addition to consideration of information available, and necessary, for the pricing techniques, two ratios (contract price to proposal price and contract price to estimate at completion without the change) are utilized to determine the potential equity of the methodology chosen. No quantitative

Adequate Proposal Cost Detail?										
SCENARIO	Price/Proposal Significant?									
	Schedule of Cost Incurrence?									
	Price/EAC without Change Significant?									
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Proposal or Performance Noncompliance	X			X		X		N/AN/A		Proposal Reconstruction
Proposal or Performance Noncompliance	X		X		X		X		N/AN/A	Price Restructuring; Shrink proposal
Proposal or Performance Noncompliance		X		X		X		N/AN/A		Negotiate Proposal Reconstruction
Proposal or Performance Noncompliance		X		X		X		N/AN/A		Negotiate Price Restructuring
Performance Noncompliance; All Other Changes	N/AN/A	N/AN/A	N/AN/A				X		X	ETC
Performance Noncompliance; All Other Changes	N/AN/A	N/AN/A	N/AN/A				X		X	ETC with Sharp Multiplier

measure of "significance" is provided; it is believed that this decision can best be reached between parties. Representative contracts can be chosen by the parties from the contractor's schedule provided to test the significance of the ratios.

The notion of making the pricing methodology the subject of negotiation between parties was discussed during many of the research interviews. Two respondents took different stands on the issue. One ex-auditor supported the notion:

[The parties should] Agree on a CIP...[pricing] methodology just like they would agree to the conditions of a audit sample of a stratified population.

A former price analyst, however, argued that certain qualifications were necessary before he could accept the negotiation of price methodology:

Aren't you foreclosing certain rights[of the Government] by agreeing to the...[pricing]...methodology early on? Do you want to go that far? The Government will want to know the financial impact of the decision before you make it. How much can you give away? It might work if we know the [accounting] system well enough, but usually we don't!

In the opinion of this researcher, the procedures described thus far provide for the ACO's working knowledge of the accounting system and allow for some preliminary tests of the methodology chosen when the significance of the two ratios shown in Figure 5-2 is determined. With this knowledge, and the best interest of the Government in mind, it is believed that the ACO can reach a sound negotiation objective as to

the appropriate pricing methodology. In the interests of equity, feasibility and a continuing atmosphere of mutual cooperation, the choice of pricing methodology should be subject to agreement between parties.

9. Conclusion of CIP Preliminaries

The advance agreement that was initiated at the beginning of the process should now be concluded by detailing the nature of the agreements reached by the parties. In addition to the time frames of the change already included, the implementation date of the change proposed or the initiation date and scheduled correction date of the change discovered, the nature and description of the change, the Contract Universe schedule, the results of the ACO's compliance determination, and the pricing methodology to be utilized should be incorporated. Each of these details will serve to define the subsequent cost impact assessment process, "bind" the parties to that definition and the agreements reached and limit the use of information provided for the process to that purpose only. The advance agreement should be concluded with a commitment to mutual cooperation between parties in the cost impact assessment, perhaps specifying that the Government will keep its requests for cost impact proposals and supporting information "reasonable" and that the contractor will respond to such requests "promptly." Once executed, the stage is set for the actual assessment of cost impact.

C. QUANTIFICATION OF THE CHANGE

The materiality and assessment methodologies presented herein are presented in order of their complexity, and, therefore, cost to administer and execute. The ACO needs to be guided continually by the CASB's materiality criteria, especially the following exhortation:

The cost of administrative processing...shall be considered. If the cost to process [the cost impact assessment] exceeds the amount to be recovered, it is less likely the amount will be material.⁵

During the Lamm study, it was discovered that:

Several ACO's...have determined rather substantial cost impacts (several hundred thousand dollars) to be immaterial because it would require more in administrative costs to make the adjustments than the amount that would be recovered or paid out.⁶

Therefore, the ACO should approach the impact assessment methodologies predisposed to keeping the process as simple as the best interest of the Government allows and with a resolution to dismiss the issue as soon as it can be determined to be immaterial.

1. Techniques for Assessment

The ACO need not commence the cost impact study with the first assessment technique described herein. If his understanding of the change indicates, or the earlier tests of the pricing methodology agreed to suggest, a more extensive

⁵4 CFR 331.71(a)(6).

⁶David V. Lamm, "Administration of CAS," p. 238.

assessment technique must be used, the process should be initiated there. Except in extraordinary cases, however, the assessment process should not commence by requiring the contractor to submit a detailed, and fully substantiated, contract-by-contract CIP. Instead, the first impact study initiated should be the one that promises a reasonably precise determination with the minimum investment in time and administrative cost.

a. Gross Effects Study

As a result of the contractor's description of the change in CAP's, the ACO should have developed a working understanding of the gross effects, or the immediate impact of the shift in costs, of the change on covered contracts. If a shift in direct cost allocation to contracts will be the result of the change, a few of the larger individual contracts that contain significant levels of the direct cost can be selected to determine, by the pricing methodology chosen, the level of increase or decrease in the magnitude of that element. If the amounts are considered material to the contract prices or costs, the ACO should proceed to an aggregate impact study. If the change in direct cost loading is judged immaterial, the changes in allocation of indirect cost pools that will result from the direct cost shifts should be traced. If the total impact, cumulative shifts in direct and indirect cost, within the contract is immaterial, the cost impact of the change can be considered immaterial. If not, an aggregate impact study is required.

Audited overhead forecasts produced by the contractor during the preliminary phases can be used to measure the gross effects of the shift in costs if the CAP had initial impact therein. The impact may be represented as a percentage change in the pool's allocation rate on the larger contracts and the ripple effect should be traced to the final allocation. Again, if this test indicates the cost impact is immaterial, no further study is required. If the impact is material to the cost or price of each contract, an aggregate impact study should be performed.

It should be noted that a study of the gross effects of the CAP change in order to make a materiality determination is not presently sanctioned by, or proposed for inclusion in, DAR.

b. Aggregate Impact Study

An alternate assessment methodology, an aggregate impact study, may be utilized for both materiality and cost impact determinations. Unlike the gross effects study, the determinations are not solely reliant upon a detailed assessment of a few large contracts selected from the CAS Universe. Instead, this study assesses the impact of larger contracts, stratified by type, verifies the results of this assessment against a legitimate sample of contracts and prorates the impact determined thereby over the population of covered contracts. Since it does not lend itself to contract price

adjustment of individual contracts, this study is most appropriate for cost impact determination when earlier analysis indicates that cost impact on individual contracts may be immaterial, but that the cumulative effect over the Contract Universe is material.

(1) Simplified Study. A few large contracts, selected from each class of contract types, should be analyzed by the ACO, using the predetermined pricing methodology. As Hal Sharp recommends, however, impact upon the allocation of costs from management pools is ignored in the simplified version of an aggregate impact study:

Do not adjust costs that are normably controlled by management on a total dollar basis such as IR&D, B&P, and G&A. Assume no change in total⁷ cost even though cost distribution may be different.

Net impact determined on each group of large contracts should then be compared to results of a similar study on a scientific sample of contracts from each class. If results are reasonably comparable, as a percentage of total cost or price on each contract studied, a midpoint percentage for each class of contract, between the results of the two studies, can be prorated over all contracts and a total cost impact figure computed. Conversely, if both studies indicate an immaterial impact, the process need proceed no further.

⁷ Procurement Associates, Inc., Cost Accounting Standards, p. XIII-28.

In recognition of the fact that larger contracts that contain a high level of the cost element impacted will be affected most by an alteration in CAP's, the first study can be expected to produce the most significant findings. It would not be valid, however, to prorate results from the initial study of large contracts over the CAS Contract Universe. Therefore, a comparison of the ratios of net impact to total cost or price, by type of contract, is made to those from a scientific sample, drawn from the stratified population where each member has an equal probability of being selected. If the results are consistent, it is legitimate to apply them over all contracts. If the results are not consistent, a more detailed study is warranted.

(2) Detailed Study. The sole variation between the detailed methodology and the simplified one previously described is the inclusion, in the former, of shifts in allocations within management pools. This study is particularly appropriate for materiality and cost impact determinations when the CAP change represents an alteration in the measurement, assignment or allocation of costs to and from the management pools themselves. Again, however, results of the detailed study may only be considered legitimate, and suitable for total cost impact assessment, if the net impact assessed in the large contract sample and the scientific sample are consistent.

c. Threshold Contract-By-Contract Study

A contract-by-contract study may be limited to larger contracts only, contracts of a certain type, or contracts that contain a stated percentage of the cost element impacted by the change. In the case of mandatory and voluntary changes, it may be appropriate to limit the study to those that are less than a certain percentage complete, e.g., 75 per cent, since the cost impact is likely to be relatively insignificant on contracts with small estimates-to-complete.

Professional judgment must be used to determine whether the study performed on the reduced population should be simplified or detailed.

A threshold contract-by-contract study should be initiated when cost impact on some contracts is considered material but it is reasonable for the ACO to assume that cumulative impact upon individual contracts below a certain threshold is immaterial.

d. Contract-By-Contract Study

The most complex assessment methodology is the one performed routinely under present regulations. All covered contracts in the Contract Universe affected by the change are assessed, using the pricing methodology established. Either a simplified or detailed study of all contracts may be performed. The contract-by-contract assessment methodology should be used when it is reasonable to expect that the impact on each contract in the CAS Contract Universe will be material

and that most, or all, active contracts should be adjusted to amend or reflect the impact.

2. Proposal Format

During the quantification process, assessment methodology instructions to the contractor should include specific requirements on the format and presentation of the contractor's submission. The ACO's proposal information requirements and organization instructions must be appropriate for the pricing and assessment methodologies utilized for the study, consider the leadtime allowed the contractor and the administrative effort required to produce the information and geared to enhance ease of audit. The auditor's format recommendations should be requested.

In general, all studies should be presented in a fashion that summarizes net cost impact determined on each contract scrutinized. A schedule, by individual contract, should be attached that follows the cost element-by-cost element format of, or utilizes, a DD 633 and indicates contract cost before the change and contract cost with the change incorporated. The contracts studied should then be summarized to show net increase, or net decrease, by contract type. Although they are not necessary for inclusion for each contract studied, the contractor should be informed that accounting work papers may be requested on selected, or all, contracts studied. These may be used by the auditor to verify the contractor's use of the established pricing methodology and computations.

Any pricing methodology that utilizes current cost data to establish a baseline (estimate-to-complete or, possibly, a negotiated proposal or price cost breakdown) may require the contractor's certification that current, accurate and complete cost or pricing data was utilized for the estimates. The contractor should also be informed that production of the cost or pricing data substantiation may be required during proposal audit, but that cost or pricing data need only be identified when the impact proposal is initially submitted. It may be legitimately argued that any subsequent proposal for a change, accounting or performance, to a contract that required certification of cost or pricing data during original price negotiations should also be certified, however, current interpretation of P.L. 87-653 requirements only necessitates certification when aggregate increases and decreases on costs exceed \$100,000.

Audited impact proposal submissions should be used as the basis for initially notifying, in writing, cognizant PCO's of contracts that are susceptible to more significant price adjustments as a result of the CAP change.

3. Determination of Net Effects to the Government

Depending upon the source of the practice change, the ACO should use the audited proposal to determine net increase or decrease in costs by type of contract, by buying office, by agency and total impact.

a. Offsets

The cumulative effect to the Government of the CAP Change may be determined by offsetting contract higher levels of cost allocation against lower levels of cost allocation within each contract type grouping and group net increases against group net decreases, as recommended in Working Group Item 76-8.

b. Increased Costs

Discretionary and noncompliant changes must be analyzed to determine the potential for, or payment of, increased costs. An "expenditure schedule,"⁸ showing the history of cost vouchers reimbursed and partial or progress payments made for each contract studied, must be submitted by the contractor. Generally, if the impact assessment process can be concluded before the implementation date of the discretionary change, no increased costs will have been paid. For noncompliant changes, increased costs paid should be determined by applying a net increase to contract cost ratio to every payment made under every contract impacted from the date the noncompliance began to the date of the last payment made before the contractor corrected practice.

Potential increased costs will be discussed in the "Contract Price Adjustment" subsection.

⁸Ibid, p. XIII-30.

4. Interest Penalties

Increased costs paid under the contract, as a result of a noncompliant change, will result in an assessment of interest penalties against the contractor. One methodology successfully utilized by an ACO was discovered during the course of the research. The period of increased cost payment was plotted for each contract on a time line chart. A midpoint was selected between the date of initial increased cost payment on the first contract awarded and the date of first payment on the last contract awarded. The appropriate simple interest rate was then applied to the net increased cost paid on all contracts over the midpoint to interest repayment date. In the opinion of this researcher, this represents an equitable and fairly precise methodology. Interest penalties, however, may also be determined and accumulated on each individual contract.

5. Profit or Fee Adjustments

In anticipation of contract price adjustments, profit or fee structures must be scrutinized for possible adjustment. This subject is highly controversial, as noted during the Working Group Field Survey:

The question of whether and how profit should be adjusted when CAS cost adjustments are made has been raised in the Working Group several times. Generally, it was concluded that profit adjustments should be made if cost adjustments are significant. At the CAS Workshop

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conducted by ALMC, Fort Lee, Virginia, attempts to teach methods for profit adjustment have generated such controversy that this section is no longer taught.⁹

The ACO should be guided by the CASB Regulations, which provide:

...the United States [must] not pay increases costs, including a profit enlarged beyond that in the contemplation of the parties to the contract when the contract costs, price, or profit is negotiated....¹⁰

This rule, pertaining to the noncompliant and discretionary change prohibition of increased costs, should also be extended to equitable adjustments made necessary by mandatory or sanctioned changes. In general, profit or fee impact must be considered whenever a CAP change leads to a material net increase or decrease in costs in a covered contract. If profit or fee is not included in the adjustment, the pricing stabilization need to which CAS responds remains unanswered. The Working Group and all interviewees questioned on the subject reached the same conclusion.¹¹

All respondents to the interviews were in favor of using the original negotiated rate in determining the level of profit or fee adjustments. The net increase or decrease in costs on each contract studied and being considered for adjustment would simply be multiplied by the negotiated rate.

⁹DOD CAS Working Group Field Survey, p. 20.

¹⁰4 CFR 331.70(c).

¹¹DOD CAS Working Group Field Survey, p. 20.

Total contract impact would be the sum of profit or fee impact and cost impact. In firm fixed-price contracts, however, a profit rate must be agreed upon by the parties. Unless the rate was established as a result of the pricing methodology utilized (proposal reconstruction or price restructuring), the ACO should negotiate a profit rate for the adjustment with the contractor, utilizing the original post-negotiation memorandum to reach a negotiation objective for each FFP contract.

6. Contract Price Adjustments

An extensive treatment of contract price adjustments will not be attempted here.¹² Since, however, it is the concluding step of the impact assessment process, some general guidelines for shifts in incentive structures and contract prices and techniques to effect adjustments will be offered. The CASB requires contract price adjustments if the cost impact is material.

a. Incentive Restructuring

Whenever a material cost impact is determined on an open fixed-price incentive (FPI) or cost-plus-incentive-fee (CPIF) contract, target cost, target price, ceiling price and minimum and maximum fee provisions of the contract if applicable, must be adjusted. If the incentive structure

¹²Interested readers will find the subject fully explored in the Lamm study.

is not adjusted, it will no longer serve, in the manner intended during price negotiations, as a cost reduction motivator for the contractor and substantial cost overruns or underruns could be experienced. If, however, the incentive contract is all but complete and failure to make an adjustment will not drive the contractor over or under the point of total assumption in an FPI contract, or outside or inside the range of effective incentive in an CPIF contract, an adjustment to incentive provisions can be waived.

Restructuring the incentive provisions as the result of a material cost impact is a relatively simple process. The example below will serve to illustrate the technique:

	<u>FPIF Contract Original</u>	<u>CPIF Contract Original</u>
Target Cost	200,000	300,000
Target Profit	20,000 (10%)	30,000 (10%)
Target Price	220,000	330,000
Ceiling Price	240,000 (120%)	Not Applicable
Minimum Fee	Not Applicable	15,000 (5%)
Maximum Fee	Not Applicable	45,000 (15%)
Share Ratio	80/20	80/20

If a higher level of costs of \$50,000 to the FPIF contract was the result of a mandatory change, target cost should be increased to \$250,000 and the FPIF structure recalculated around the new target costs utilizing the original negotiated profit and ceiling percentages. If, as a result of a non-compliant change, a \$40,000 lower level of costs was allocated to the CPIF contract, a similar recalculation should be

effected. The restructured incentive provisions for each contract are illustrated below:

	<u>FPIF Contract Restructured</u>	<u>CPIF Contract Restructured</u>
Target Cost	250,000	260,000
Target Profit	25,000 (10%)	26,000 (10%)
Target Price	275,000	286,000
Ceiling Price	300,000 (120%)	Not Applicable
Minimum Fee	Not Applicable	13,000 (5%)
Maximum Fee	Not Applicable	39,000 (15%)
Share Ratio	80/20	80/20

Current field practice and the interviews with Government and industry personnel support the conclusion that the incentive share ratio should not be adjusted. Generally, interviewees argued that the shift in costs caused by a change in CAP's does not lead to a change in the level of effort on the contract, as is the case in a performance change, and, therefore, the share ratio should not be altered.

An opposing argument, however, could be advanced. A substantial shift in costs to an incentive contract alters the allocation of risk assumed by the Government and the contractor. A large shift to the contract may increase the risk of performance; a shift from the contract may reduce the risk. If the risk inherent in performance is substantially altered by a CAP change, the ACO may find it necessary to review the share ratio, and, in some cases, adjust it to reallocate risk between the contractor and the Government. This decision must be left to the ACO's professional judgment and his consideration of each incentive contract structure.

b. Price Adjustment Techniques

Defense Procurement Circular 75-6 offered the following guidance on contract price adjustments:

Although these paragraphs permit offsets among CAS contracts, price adjustments to each CAS contract are not precluded if necessary. In most cases, adjustments to each contract will be necessary, unless the amounts involved are considered to be insignificant...¹³

Hal Sharp, therefore, recognizes two techniques for adjusting prices of affected covered contracts: the net increase or decrease method, where, after maximum use of offsets, the net increase or decrease to the Contract Universe is parceled out over selected contracts whose prices are adjusted; and the individual contract price adjustment method, where the price of each individual contract affected by the change is adjusted.¹⁴ Each technique will be briefly explored.

(1) Net Cost Increase or Decrease Adjustment.

After the net effect on costs to the Government has been determined, after all increases have been offset against all decreases, the net increase or net decrease is prorated to all, or some, of the affected contracts. Adjustments to one contract of each contract group, one contract from each buying activity, or large contracts only have been suggested. If the ACO utilizes this methodology, both cost impact and funding levels on individual contracts will be minimally

¹³As cited in Cost Accounting Standards, Procurement Associates, Inc., p. XIII-32.

¹⁴Ibid.

affected. The price of this convenience, however, is the loss of pricing stabilization on contracts that were affected but were not adjusted to reflect their total impact. Thus, this technique is not appropriate in situations where the cumulative effect of immaterial cost impact on each individual contract is considered material.

(2) Individual Contract Adjustment. Once the net effect of the CAP change has been determined on individual contracts, each contract is adjusted, upward or downward, to reflect the shift. Though this technique promotes pricing stability, it may be laborious and lead to funding problems, forcing obligation or deobligation of funds. It is most appropriate when cost impact on each contract is considered material.

(3) Other Alternatives. There is, of course, a middle ground that may be reached by the ACO, adjusting some contracts to reflect their individual cost impacts and subjecting others to the net increase or decrease method. The ACO may, for example, choose to adjust only incentive contracts individually or only contracts that have experienced an impact to contract price ratio above a certain quantified threshold. The contract price adjustment technique should remain within the ACO's discretion so it can be flexible enough to meet the variety of scenarios possible.

c. Effecting the Adjustment

The ACO should use price reductions or increases to adjust firm fixed-price contracts and cost disallowances and/or adjustments to funding features to adjust flexibly priced contracts.

In discretionary or noncompliant changes, the net impact will be in the form of increased costs paid and potential increased costs. A supplemental agreement with the contractor should be sought that lowers the prices or funding features of the contracts to be adjusted. Since it is not equitable to collect increased costs that have not been incurred as of the date of the adjustment and because immediately imposing the total downward adjustment upon the contractor may cause capital problems and affect performance, the agreement should specify an amortization schedule of the decreases, effected by cost disallowances or a reduction in progress payments, over the remaining life of the contract. Interest penalties or increased costs on closed contracts may be paid by check by the contractor.

Equitable adjustments for sanctioned and mandatory changes should be handled similarly. The supplemental agreement should specify increases in progress payments or billing prices for contracts that rate upward adjustments.

D. OTHER ITEMS OF INTEREST

1. Negotiation

The cognizant ACO is required to conduct negotiations and execute supplemental agreements on behalf of all Government agencies. PCO's must be invited to attend negotiations if the price on any one of their contracts will be increased by \$10,000 or more.¹⁵ These negotiations are final and the agreement binding, despite any subsequent evidence that actual cost impact on a contract was greater or lesser than expected.¹⁶

2. Effects on Subcontracts

The cognizant ACO will negotiate cost impact on the contractor's covered subcontracts, however the supplemental agreement to adjust subcontract price must be made between the subcontractor and the next higher tier subcontractor or the prime contractor. DAR 3-1207(c)(iii) requires the ACO to forward a copy of his post-negotiation memorandum specifying the agreement made with the contractor on subcontracts to the cognizant ACO of the next higher tier subcontractor or prime contractor. The process is continued until the proper adjustment is reflected in the prime contract.

¹⁵DAR 3-1207(c).

¹⁶4 CFR 331.70(d).

3. Multiple Accounting Changes

If the implementation dates are the same and each change is eligible for equitable adjustment, or each will lead to downward adjustment only, multiple accounting changes may be made simultaneously. If these conditions are not met, however, the contractor should be required to phase in the changes at intervals in order to allow a separate impact assessment for each implementation date, each adjustment allowed for the changes or each correction of a noncompliant change.

E. THE PRECISION OF COST IMPACT ASSESSMENT

Each impact assessment must be tempered by realism on the part of each party. As one interviewee stated:

We don't know and never will know exactly what the [total] impact was [of the accounting practice change]---that's why these things are negotiated.

Because the impact assessment is based upon pricing methodologies that rely upon estimates, perhaps compounded by further estimates if he uses one of the shortcut assessment methodologies suggested in this Chapter, the ACO must direct the process pragmatically. A Government official interviewed argued:

Bottom-line is we're doing prospective negotiations on something that is not accurate---the ETC is inaccurate, the cost impact is inaccurate. [But] To try to get more precise would be like using learning curves, guessing T1, guessing the slope and then carrying out the answer eight decimal places. It's important to keep this in mind. You're not dealing with one contract, which is complicated enough to negotiate, but with all the

contractor's contracts. And you're trying to stop the world from rotating so you can make an accounting assessment on something that will be certainly less than one per cent of the value of any contract.

Given the lack of precision in the best, most meticulous, assessment of cost impact, and the requirement for the parties to negotiate and agree upon contract price adjustments, the ACO must be concerned with feasibility and practicality throughout the process and consider trade-offs when necessary between the "precision" of the measurement and its cost to administer and execute.

F. SUMMARY

This Chapter portrayed a framework in which the cost impact assessment process can be approached flexibly and, when justified, in a more simplified manner than present DAR CAS administration regulations allow. The ACO was presented with a structured set of procedures designed to minimize the time investment, in some cases, necessary for resolving CAS issues and a variety of options for assessment methodologies that can be chosen to fit appropriate scenarios. General procedural guidelines and contractor information requirements were recommended. Some phases of the process were only discussed briefly, however, the guidance presented is meant to be one example only of the type of additional guidance needed by ACO's. The recommended methodology has been summarized in Appendix D.

Order can be brought, and improvement made, to CAS administration that will enhance the ACO's decision-making capabilities, introduce flexibility and adaptability, and reduce the delays and confusion inherent within cost impact assessment. A CAS administration manual, dealing with CAS issues as briefly, or more extensively than, this Chapter may assist DOD in attaining order and achieving improvement.

VI. CONCLUSIONS AND RECOMMENDATIONS

As a result of the research documented herein, the study's findings can be listed and central arguments can be summarized. This final Chapter offers the conclusions drawn by the researcher concerning the assessment of cost impact of cost accounting practice changes on covered contracts. In line with the conclusions that are presented, a series of recommendations to improve this aspect of Cost Accounting Standards administration will be made. A response will be made to each of the research questions posed in Chapter One. Finally, suggestions for further research on the cost impact assessment process, or ancillary issues, will be advanced.

A. CONCLUSIONS

Conclusions reached as a result of the research are presented below.

Conclusion #1 - The cost impact assessment process, as it is presently structured and regulated by Defense Acquisition Regulations, is not the efficient, effective mechanism needed to amend the effects of an alteration in cost accounting practices.

DOD contract administrators are currently required to obtain a statement of general dollar magnitude from the contractor proposing a change to CAP's, despite its lack of

usefulness to the ACO. The ACO and auditor are presently incapable of independently verifying the CAS Contract Universe, the identification of which is vital to the assessment process, and must rely upon the contractor's system of identifying contracts affected by the change. The impact assessment process can be easily stymied by an uncooperative contractor who refuses to comply with the CAS Administration Clause. At a minimum, the impact assessment process, even if the change results in an immaterial cost impact, presently requires approximately 180 days to resolve. Each of these shortcomings contributes to the inefficiency and ineffectiveness.

Conclusion #2 - Cost impact assessment is administered inflexibly by the majority of DOD personnel, with little consideration given to the appropriateness, feasibility and equity of the methodologies chosen.

Chapter Four of this research indicated that variants on pricing methodologies and assessment methodologies are generally not considered. Contract repricing is the pricing methodology mandated to assess the cost impact of performance noncompliance, despite the frequent absence of the proposal detail needed to utilize it. Proposal reconstruction has been utilized with little regard given to the equity of ignoring the reduction of the proposed price to the agreed upon price achieved during negotiations. ACO's are required to obtain a contract-by-contract cost impact proposal from a contractor who makes a CAP change, despite the existence of

of several valid assessment methodologies that could be performed with a smaller investment of time and effort.

Conclusion #3 - Additional agency-wide guidance on cost impact assessment is needed by DOD personnel to overcome the complexity and confusion that characterizes the present CAS administration environment.

Guidance available to ACO's and auditors is sketchy and inadequate. Administering CAP change issues, with only the brief discussion contained within Working Group Items to supplement DAR requirements, inevitably leads to questions concerning CIP format, substantiating cost or pricing data, materiality determinations, techniques to effect contract price adjustments and a variety of other challenges. Real-world CAP change scenarios are frequently further complicated by the multitude of active and closed contracts affected and the potential for simultaneous practice changes. An agency-wide effort to deal with many of the varied scenarios and common difficulties experienced by contract administrators needs to be mounted.

Conclusion #4 - Roles of, and relationships between, Government players in CAS administration are confused, conflicting and a hindrance to the resolution of CAP change issues.

A "turf" problem between the ACO and auditor, DCAS and DCAA, exists in CAS administration that is neither healthy nor beneficial to the efficient conduct of cost impact assessment. There have been attempts to elevate the auditor's

CAS recommendations to the ACO to determinations. The average ACO finds his traditional decision-making role challenged by the power wielded by, or his over-reliance upon, the contract auditor. A potential exists for industry exploitation of this conflict within the contract administration team.

B. RECOMMENDATIONS

Recommendations that address the problems inherent within the present cost impact assessment process, and noted in the preceding conclusions, are directed to DOD.

Recommendation #1 - Publish a CAS administration manual which would, among other things, focus on the various pricing and assessment methodologies and the techniques suitable for effecting contract price adjustments.

More extensive guidance, not direction, on the day-to-day issues facing the administrators of covered contracts can be provided. This will serve to introduce flexibility into the cost impact assessment process. Additionally, the process can be simplified by presenting it in a series of manageable, finite activities that the average ACO, despite his non-accounting background, can direct. Much of the confusion and complexity can be eliminated and appropriateness and equity promoted by means of a CAS administration manual. Such an effort is both feasible and desirable and best accomplished at the DOD level. Chapter Five and Appendix D of the research attempted to provide an example of the guidance needed.

Recommendation #2 - Amend the CAS Administration Clause to provide the Government a contractual right to resolve CAP change issues unilaterally, not subject to appeal, when the contractor refuses to submit a cost impact proposal.

This method of compelling the contractor to cooperate during the cost impact assessment process seems the most effective solution discovered in the course of the research. The CAS Administration Clause should be amended to reserve for the Government the right to assess cost impact, and make contract price adjustments from the best accounting data available when the contractor refuses to submit the information required. The contractor would have no right to appeal this determination (similar to the provisions of the Termination for Convenience Clause). The very existence of this option will succeed in winning cooperation from most contractors. To maintain control over the use of this unusual measure, it is recommended that DOD require a determination be made at some level above the ACO before it is exercised.

Recommendation #3 - Utilize an improved Federal Procurement Data System to enable contract administrators to independently assess the CAS Contract Universe at a covered contractor's plant.

This action will require active DOD participation in resolving the current inadequacies of the FPDS. When reliable information is available from the System, however, DOD should initiate action to: (1) provide regional FPDS access to its

field contract administration activities; and (2) recommend to the Office of Federal Procurement Policy that covered subcontracts be input into FPDS upon prime contractor notification that such a contract has been awarded. These actions will make the ACO capable of verifying the covered contracts and subcontracts that may have been affected by a CAP change, and less dependent upon the contractor's proposal.

Recommendation #4 - Promulgate a high-level DOD policy statement to strengthen and support the proper role of the ACO and reestablish the relationships between the procurement and contract administration team members in CAS issues.

The role of decision-maker in CAS matters must be restored to the ACO via a clear agency-wide sanction. The power exerted by the contract auditor must be restrained and the proper ACO-auditor relationship, clearly subordinating the auditor to an advisory capacity, must be reestablished. PCO's must be formally required to assist in the effort to win contract compliance with provisions of the CAS Administration Clause. Price analyst training must be intensified to insure that they are capable of providing an alternate source of recommendations on CAS matters to the ACO. Each of these actions, promulgated under a DOD policy statement umbrella, will provide the political support the ACO needs to eliminate conflict. The policy statement would be most appropriately issued by the Deputy Under Secretary of Defense (Acquisition Policy).

C. REVIEW OF RESEARCH QUESTIONS

In order to respond to the primary research question, four subsidiary questions were posed. Responses to the research questions can now be provided, beginning with the subsidiary questions and culminating with the primary question.

Subsidiary Question #1 - What are the requirements of the mandatory Cost Accounting Standards Clause concerning the measurement of cost impact and the nature of DOD and contractor response to these requirements?

The CAS Administration Clause requires the contractor to submit to the ACO an adequate description of any change proposed to his disclosed or established cost accounting practices at least 60 days prior to its implementation. With the description, the contractor is required to submit the initial stage of a two-phased quantitative proposal of the cost effects of the change, a statement of general dollar magnitude, indicating the cumulative increases and decreases caused by the change. If the change is determined compliant, the contractor is required to submit a contract-by-contract cost impact proposal identifying the cost impact on each contract in the CAS Contract Universe. Once audited, this proposal is utilized by the ACO to assess cost impact, make materiality and increased costs determinations, negotiate contract price adjustments with the contractor. DOD contract administrators have, in general, attempted to comply with their obligations under the Clause; contractor compliance with the Clause has

has been spotty. Efforts are underway to amend the Clause to provide the Government a capability of enforcing its requirements upon uncooperative contractors.

Subsidiary Question #2 - What guidance, regulatory and otherwise, has been provided DOD contract administrators in this area and, specifically, where is it lacking?

DAR Sections 3-1200 to 3-1214 provide the most substantive regulatory guidance available to the ACO. the DLAM does not appreciably supplement this information. DOD CAS Working Group Items provide only brief discussions on CIP formats, the use of the offset mechanism and the two basic cost impact assessment pricing methodologies. In total, guidance to contract administrators is lacking on pricing methodology options, alternate cost impact assessment methodologies and techniques to effect contract price adjustments. Materiality criteria, CIP cost or pricing substantiation and simultaneous CAP changes need exploration. A unified, step-by-step source of instruction and options concerning the phases of cost impact assessment is not available to contract administrators. An attempt to answer such a need was presented in Chapter Five.

Subsidiary Question #3 - What pricing methodologies have been developed and are being utilized?

Contract repricing, an attempt to interpolate, after the fact, the change proposed or discovered into the negotiation, and the estimate-to-complete method, where current cost data is utilized to measure the cost differential associated with

the incorporation of the CAP change, are the two methodologies in use. Research indicated that a variant of each methodology has been used infrequently. The Working Group has directed that contract repricing be utilized to assess the cost impact of CAS noncompliance and that ETC be utilized in all other change source scenarios. No further guidance on the use of each basic methodology, and appropriate variants thereof, has been made available to DOD contract administrators. Chapter Four addressed this subject in detail.

Subsidiary Question #4 - Can a model be devised to structure and simplify the real-world accounting variations in which cost allocation shifts or deviations in the measurement of costs are manifested?

Such a "model" was devised during the course of the research. This model, a sequential presentation of the procedures to be followed by the ACO, and the information necessary to assess cost impact, was described in Chapter Five. A summarization of Chapter Five, presented in the structured format of a model, is contained in Appendix D. Each effort was designed to illustrate one example of supplemental guidance that could be made available to DOD contract administrators.

Primary Research Question - How can the cost impact of changes to, or noncompliance with, cost accounting practices or Cost Accounting Standards be measured?

Conceptually, cost impact can be assessed by identifying: (1) the nature of the change and its effect on the accounting allocation sequence; (2) the appropriate cost baseline (original or current cost data) from which cost shifts can be measured; and (3) the population of affected contracts. Once this information is known, the pricing methodology, that utilizes the baseline and most accurately measures the shift in costs, can be applied to the contracts. An assessment methodology can be developed that allows a total cost impact measurement, of reasonable precision, over the CAS Contract Universe with the minimum investment of time and effort. Such a measurement will allow the ACO to make materiality determinations and develop a contract price adjustment technique suitable for the assessment methodology and responsive to the needs originally identified during CAS implementation.

D. SUGGESTIONS FOR FURTHER RESEARCH

The following areas have been identified as potential subjects for further research:

1. A computerized cost impact assessment model to test the relative accuracy of the pricing and assessment methodologies proposed in this thesis;
2. An in-depth analysis of contract price adjustment techniques, including the timing of price adjustments and cost disallowances;

3. The development of a set of procedures and decision criteria to be utilized in auditing and approving a proposal for simultaneous CAP changes.

E. CLOSING STATEMENT

It is not expected that every reader will agree with the conclusions and recommendations developed as a result of this study. It is anticipated, however, that consideration of the arguments presented herein will lead to a review of, and, hopefully, subsequent improvement in, the guidance provided DOD personnel in Cost Accounting Standards administration.

APPENDIX A

CAS CONTRACT CLAUSE

COST ACCOUNTING STANDARDS (1978 MAR)

(a) Unless the Cost Accounting Standards Board has prescribed rules or regulations exempting the contractor or this contract from standards, rules and regulations promulgated pursuant to 50 U.S.C. App. 2168 (Pub. L. 91-379, August 15, 1970), the contractor, in connection with this contract shall:

(1) By submission of a Disclosure Statement, disclose in writing his cost accounting practices as required by regulations of the Cost Accounting Standards Board. The required disclosures must be made prior to contract award unless the Contracting Officer provides a written notice to the contractor authorizing post-award submission in accordance with regulations of the Cost Accounting Standards Board. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the contractor and which contain this Cost Accounting Standards clause. If the contractor has notified the Contracting Office that the Disclosure Statement contains trade secrets and commercial and financial information which is privileged and confidential, the Disclosure Statement will be protected and will not be released outside of the Government.

(2) Follow consistently the cost accounting practices disclosed pursuant to (1) above in accumulating and reporting contract performance cost data concerning this contract. If any change in disclosed practices is made for purposes of any contract or subcontract subject to Cost Accounting Standards Board requirements, the change must be applied prospectively to this contract, and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustments shall be made in accordance with subparagraph (a)(4) or (a)(5) below, as appropriate.

(3) Comply with all Cost Accounting Standards in effect on the date of award of this contract or if the contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the contractor's signed certificate of current cost or pricing data. The contractor shall also comply with any Cost Accounting Standard which hereafter becomes applicable to a contract or subcontract of the

contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4)(A) Agree to an equitable adjustment as provided in the changes clause of this contract if the contract cost is affected by a change which, pursuant to (3) above, the contractor is required to make to his established cost accounting practices whether such practices are covered by a Disclosure Statement or not.

(4)(B) Negotiate with the contracting officer to determine the terms and conditions under which a change may be made to either a disclosed cost accounting practice or an established cost accounting practice, other than a change made under other provisions of this subparagraph (4): Provided, That no agreement may be made under this provision that will increase costs paid by the United States.

(4)(C) When the parties agree to a change to either a disclosed or an established cost accounting practice, other than a change under (4)(A) above, negotiate an equitable adjustment as provided in the changes clause of this contract.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if he or a subcontractor fails to comply with an applicable Cost Accounting Standard or to follow any practice disclosed pursuant to subparagraphs (a)(1) and (a)(2) above and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon computed at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, or seven per cent per annum, whichever is less, from the time the payment by the United States was made to the time the adjustment is effected.

(b) If the parties fail to agree whether the contractor or a subcontractor has complied with an applicable Cost Accounting Standard, rule or regulation of the Cost Accounting Standards Board and as to any cost adjustment demanded by the United States, such failure to agree shall be a dispute concerning a question of fact within the meaning of the disputes clause of this contract.

(c) The contractor shall permit any authorized representatives of the head of the agency, of the Cost Accounting Standards Board, or of the Comptroller General of the United States to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The contractor shall include in all negotiated subcontracts which he enters into the substance of this clause except paragraph (b) of this section and shall require such inclusion in all other subcontracts of any tier, including the obligation to comply with all Cost Accounting Standards in effect on the date of award of the subcontract or if the subcontractor has submitted cost or pricing data, on the date

of final agreement on price as shown on the subcontractor's signed certificate of current cost or pricing data. This requirement shall apply only to negotiated subcontracts in excess of \$100,000 where the price negotiated is not based on:

- (1) Established catalog or market prices of commercial items sold in substantial quantities to the general public, or
- (2) Prices set by law or regulation, and except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to accept the Cost Accounting Standards clause by reason of Section 331.30(b) of Title 4, Code of Federal Regulations (4 CFR 331.30(b)).

However, if this is a contract with an agency which permits subcontracts to appeal final decisions of the contracting officer directly to the head of the agency or his duly authorized representative, then the contractor shall include the substance of paragraph (b) as well.

NOTE: In any case where a subcontractor determines that the Disclosure Statement information is privileged and confidential and declines to provide it to his contractor or higher tier subcontractor, the contractor may authorize direct submission of that subcontractor's Disclosure Statement to the same Government offices to which the contractor was required to make submission of his Disclosure Statement. Such authorization shall in no way relieve the contractor of liability as provided in paragraph (a)(5) of this clause. In view of the foregoing and since the contract may be subject to adjustment under this clause by reason of any failure to comply with rules, regulations, and Standards of the Cost Accounting Standards Board in connection with covered subcontracts, it is expected that the contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the contractor. However, the inclusion of such a clause and the terms thereof are matters for negotiation and agreement between the contractor and the subcontractor, provided that they do not conflict with the duties of the contractor under its contract with the Government. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification to be submitted by his subcontractors.

(e) The terms defined in Section 331.20 of Part 331 of Title 4, Code Federal Regulations (4CFR 331.20) shall have the same meanings herein. As there defined, "negotiated subcontract" means "any subcontract except a firm fixed-price subcontract made by a contractor or subcontractor after receiving offers from at least two firms not associated with each other or such contractor or subcontractor, providing

(1) the solitication to all competing firms is identical,
(2) price is the only consideration in selecting subcontractor
from among the competing firms solicited and (3) the lowest
offer received in compliance with the solicitation from among
those solicited is accepted."

APPENDIX B

CAS ADMINISTRATION CLAUSE

ADMINISTRATION OF COST ACCOUNTING STANDARDS (1978 MAR)

For the purpose of administering Cost Accounting Standards requirements under this contract, the Contractor shall:

(a) Submit to the cognizant Contracting Officer a description of the accounting change and the general dollar magnitude of the change to reflect the sum of all increases and the sum of all decreases for all contracts containing the Cost Accounting Standards clause (7-104.83(a)(1)) or the Disclosure and Consistency of Cost Accounting Practices clause (7-104-83(a)(2)):

- (i) for any change in cost accounting practices required to comply with a new cost accounting standard in accordance with paragraph (a)(3) and (a)(4)(A) of the clause entitled "Cost Accounting Standards" within sixty (60) days (or such other date as may be mutually agreed to) after award of a contract requiring such change;
- (ii) for any change to cost accounting practices proposed in accordance with paragraph (a)(4)(B) or (a)(4)(C) of the clause entitled "Cost Accounting Standards" or with paragraph (a)(3) or (a)(5) of the clause entitled "Disclosure and Consistency of Cost Accounting Practices" not less than sixty (60) days (or such other date as may be mutually agreed to) prior to the effective date of the proposed change; or
- (iii) for any failure to comply with an applicable Cost Accounting Standard or to follow a disclosed practice as contemplated by paragraph (a)(5) of the clause entitled "Cost Accounting Standards" or with paragraph (a)(4) of the clause entitled "Disclosure and Consistency of Cost Accounting Practices" within sixty (60) days (or such other date as may be mutually agreed to) after the date of agreement of such non-compliance by the Contractor.

(b) Submit a cost impact proposal in the form and manner specified by the cognizant Contracting Officer within sixty (60) days (or such other date as may be mutually agreed to) after the date of determination of the adequacy and compliance of a change submitted pursuant to (a)(i), (ii), or (iii) above.

(c) Agree to appropriate contract and subcontract amendments to reflect adjustments established in accordance with paragraphs (a)(4) and (a)(5) of the clause entitled "Cost Accounting Standards" or with paragraphs (a)(3), (a)(4), and (a)(5) of the clause entitled "Disclosure and Consistency of Cost Accounting Practices."

(d) When the subcontract is subject to either the clause entitled "Cost Accounting Standards" or the clause entitled "Disclosure and Consistency of Cost Accounting Practices" so state in the body of the subcontract and/or in the letter of award. Self-deleting clauses shall not be used.

(e) Include the substance of this clause in all negotiated subcontracts containing either the clause entitled "Cost Accounting Standards" or the clause entitled "Disclosure and Consistency of Cost Accounting Practices." In addition within thirty (30) days after award of such subcontract submit the following information to the Contractor's cognizant Contract Administration Office for transmittal to the Contract Administration Office cognizant of the subcontractor's facility.

- (1) Subcontractor's name and subcontract number.
- (2) Dollar amount and date of award.
- (3) Name of Contractor making the award.
- (4) A statement as to whether the subcontractor has made or proposes to make any changes to accounting practices that affect prime contracts or subcontracts containing the Cost Accounting Standards Clause or Disclosure and Consistency of Cost Accounting Practices Clause because of the award of this subcontract unless such changes have already been reported. If award of the subcontract results in making a Cost Accounting Standard(s) effective for the first time, this shall also be reported.

(f) For negotiated subcontracts containing the clause entitled "Cost Accounting Standards," require the subcontractor to comply with all Standards in effect on the date of final agreement on price as shown on the subcontractor's signed certification of current cost or pricing data or date of award whichever is earlier.

(g) In the event an adjustment is required to be made to any subcontract hereunder, notify the Contracting Officer in writing of such adjustment and agree to an adjustment in the price or estimated cost and fee of this contract, as appropriate, based upon the adjustment established under the subcontract. Such notice shall be given within thirty (30) days after receipt of the proposed subcontract adjustment, or such other date as may be mutually agreed to, and shall include a

proposal for adjustment to such higher tier subcontract or prime contract as appropriate.

(h) When either the Cost Accounting Standards clause or the Disclosure and Consistency of Cost Accounting Practices clause and this clause are included in subcontracts, the term "Contracting Officer" shall be suitably altered to identify the purchaser.

APPENDIX C

RESEARCH INTERVIEWS

I. Personal Interviews

Emil Bagneschi, ACO, DCASMA San Francisco, California,
25 April 1980.

Rudy Castelli, Director of Finance, Todd Pacific Ship-
yards Corporation, Los Angeles Division, Long Beach,
California, 5 June 1980.

Frank DeVito, CAS Monitor, DCAA San Francisco, California,
16 May 1980.

Irwin L. Farmer, Manager, Industrial Accounting, Pomona
Division, General Dynamics, Pomona, California,
30 July 1980.

Frank T. Gresik, Jr., Manager, Cost Accounting, Aircraft
Division, Northrup Corporation, Hawthorne, California,
30 July 1980.

Ernest Gutierrez, CAS Specialist, DCASR Los Angeles, Los
Angeles, California, 4 June 1980.

Gunnar M. Haase, Manager of Cost Accounting, Lockheed
California Company, Lockheed Corporation, 29 July 1980.

Dave Jackson, Manager of Cost Accounting, Financial
Reporting and Data Management, Douglas Aircraft,
Los Angeles, California, 6 June 1980.

Jack Kendig, Chairman, DOD CAS Working Group, OUSD (R & E),
Washington, D.C., 24 June 1980.

William H. Mearns, Assistant Controller, Pomona Division,
General Dynamics, Pomona, California, 30 July 1980.

Noah Minkin, General Counsel, Cost Accounting Standards
Board, Washington, D.C., 23 June 1980.

Adam Moro, Controller, Manufacturing Division, Airesearch
Company, Division of Garrett Corporation, Los Angeles,
California, 29 July 1980.

John Nieman, Business Analysis Manager, Litton Corporation,
Beverly Hills, California, 31 July 1980.

Fred J. Newton, Deputy Assistant Director (Acting), Policy
and Plans, Chief of CAS Division, DCAA, Cameron Station,
Virginia, 20 June 1980.

Tom Saiki, Manager, Management Reporting and Analysis,
TRW Systems Group, Los Angeles, California, 4 June 1980.

Robert P. Scott, Chief, Price/Cost and Financial Analysis
Branch, Financial Services Branch, DCAS, Cameron
Station, Virginia, 19 June 1980.

Harold Sharp, Chief of Pricing, Air Force Space Division,
Los Angeles, California, 5 June 1980.

Lee Shigut, Controller, Rockwell Corporation, Hawthorne, California, 31 July 1980.

RADM Gerald T. Thompson, Deputy Director, DLA (CAS), Cameron Station, Virginia, 22 April 1980.

II. Telephonic Interviews

Philip J. Blatteau, Director for Financial Management, Aerospace Procurement Service Staff, Aerospace Industries Association of America, Inc., Washington, D.C., 11 April 1980.

Tom Burch, CAS Specialist, DCASR Dallas, Dallas, Texas, 15 April 1980.

Roger Hobbrook, CAS Monitor, DCAA Los Angeles, Los Angeles, California, 8 April 1980.

Dave Relly, Instructor, ALMC, Fort Lee, Virginia, 11 April 1980.

Delores Taylor, CAS Project Officer, DCAS Headquarters, Cameron Station, Virginia, 11 April 1980.

Gary Theus, CAS Specialist, DCASR Cleveland, Cleveland, Ohio, 15 April 1980.

Richard P. White, Logistics Management Institute, Washington, D.C., 16 April 1980.

Edward J. Williamson, Jr., Navy Policy Representative, Defense Acquisition Regulatory Council, OASD (MRA & L), Washington, D.C., 21 April 1980.

APPENDIX D

SUMMARY OF RECOMMENDED COST IMPACT ASSESSMENT METHODOLOGY

I. PRELIMINARIES

- A. Upon Identification or Discovery of the Change
 - 1. Review change for substance, i.e., changes in the measurement, assignment or allocation of costs to covered contracts.
 - 2. Make liaison with contractor to review understanding.
- B. Adequacy Determination and Compliance Advisory
 - 1. For voluntary and mandatory changes
 - a. Request and review Disclosure Statement amendments for adequacy.
 - b. Perform initial compliance advisory; resolve disagreements with contractor.
 - 2. For noncompliant changes
 - a. Advise contractor of possibility of noncompliance finding.
 - b. Discuss amended practices necessary to resolve questionable CAP's.
- C. Negotiate
 - 1. Timing of the change
 - a. Date of implementation of new practice.
 - b. Date of commencement of questionable practice; date noncompliance can be corrected if found.
 - 2. Identify and define CAS Contract Universe
 - a. Schedule by contract type, contract number, period of performance, buying office, incentive or pricing structure and costs incurred to date.
 - 3. Forward Pricing Rates
 - a. Overhead and management pool allocations before and after CAP change.

D. Perform Final Compliance Determination
 1. If contractor refuses to cooperate further, auditor must assess cost impact independently using pricing methodology determined unilaterally by ACO. Shift to "QUANTIFICATION" step. Auditor will use contractual access to records to perform assessment.

E. Negotiate Pricing Methodology Appropriate
 1. Use Pricing Methodology Decision Table (Table #1).

#1 PRICING METHODOLOGY DECISION TABLE

SCENARIO	METHODOLOGY	DESCRIPTION
Proposal noncompliance; proposal cost detail available	Contract repricing: Proposal reconstruction	Compare contractor's proposal with proposal utilizing noncompliant practices identified
Proposal noncompliance; no cost detail available	Contract repricing: Proposal reconstruction. Negotiate cost breakdown of proposal	Same as above; use negotiated proposal cost breakdown
Proposal noncompliance; significant cost reduction achieved in negotiating price; cost detail available	Contract repricing: Price Restructuring. Shrink proposal.	Compare contractor's price with price that would have been agreed to if noncomplying practices had been discovered and approved

Proposal noncompliance; significant cost reduction achieved in negotiating price; no cost detail available	Contract repricing; Price Restructuring. Negotiate cost breakdown of price	Same as above; use negotiated price cost breakdown
Performance noncompliance; schedule of intended cost incurrence available within proposal	Utilize proposal noncompliance methodologies above	Same as proposal noncompliance methodology descriptions above; proposal or price is reconstructed to reflect initial period of compliance preceding noncompliance
Performance noncompliance; no schedule of cost incurrence	Estimate-to-complete; Sharp multiplier	Compare ETC without the change to ETC with the change incorporated; reduce or increase the difference by the ratio of price to EAC without the change
Mandatory or voluntary change; no significant cost overrun/underrun	Estimate-to-complete	Compare ETC without the change to ETC with the change incorporated
Mandatory or voluntary change; significant cost growth or underrun in audited EAC without the change	Estimate-to-complete; Sharp multiplier	Same as performance noncompliance above

F. Consummate Advance Agreement

1. Time frames of the change.
2. Nature and description of the change.
3. Contract Universe to be assessed.
4. Results of ACO's compliance determination.
5. Pricing methodology to be utilized.
6. Commitment to mutual cooperation.

II. QUANTIFICATION

A. Cost Impact Assessment Methodology

1. Use Assessment Methodology Decision Table (Table #2).
2. Dismiss if immaterial; warn contractor that future assessment is possible if change becomes material in the future.

B. Request Cost Impact Proposal from Contractor

1. Specify format:
 - a. Cost element-by-cost element effect on each contract studied during assessment, indicating cost before and after the change, should be identified.
 - b. Summary by contract type.
 - c. Certification of proposal required if cumulative increases and decreases exceed \$100,000.
 - d. If contractor refuses to provide proposal, auditor must develop proposal specified.

C. Determine Net Effects of the Change

1. Consider offsets.
2. If increased costs have or will occur, determine increased costs paid;
 - a. Assess interest penalties.
3. Determine profit or fee impact and adjustment.

D. Develop Contract Price Adjustment Negotiation Objective

1. Consider restructuring incentive contracts.
2. Consider adjustment technique;
 - a. Use Contract Price Adjustment Technique Decision Table (Table #3).

#2 ASSESSMENT METHODOLOGY DECISION TABLE

SCENARIO	METHODOLOGY	DESCRIPTION
MATERIALITY DETERMINATION ONLY		
Materiality of change is unknown; change effect on contract costs can be adequately expressed as a percentage change in cost measurement or assignment or a rate change in allocation	Gross Effects Study	Develop a cost percentage or rate change on contracts using pricing methodology tests. Apply to selected larger contracts and trace costs through entire allocation sequence
MATERIALITY AND COST IMPACT DETERMINATIONS		
Change is suspected of being material; cumulative impact on all contracts considered material; cost impact in proportion to contract costs or prices is unknown; shortcut methodology of determining proportion is desired; if proportionality can be legitimately verified, cost impact assessment can be adequately performed thereby	Aggregate Impact Study	Same as above over two samples, one of larger contracts, one scientifically selected Simplified: trace cost shifts in allocation through all overhead pools Detailed: trace shift through to final allocations of management pools
COST IMPACT DETERMINATION ONLY		
Cost shifts on individual contracts, below a specified threshold, determined by a selected sample, to be immaterial;	Threshold Contract by Contract Study	Choose threshold; individually assess contracts above threshold through pricing methodology determined; simplified or

cost shifts on all other contracts material		detailed assessment, as necessary
Impact on all contracts considered material	Contract by Contract Study	Assess all contracts in Contract Universe using pricing methodology determined

3. Develop procedures to be used for effecting adjustment;
 - a. Price reductions or increases; progress payment adjustment.
 - b. Cost disallowances or adjustments to funding features.

III. NEGOTIATION

- A. Seek Supplemental Agreement with Contractor;
 1. Contract price adjustments;
 2. Interest penalties;
 3. Techniques for effecting adjustments.
- B. If Contractor Will Not Agree Within 20 Days;
 1. Unilateral determination by ACO of aspects where negotiation was attempted.

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#3 CONTRACT PRICE ADJUSTMENT TECHNIQUE DECISION TABLE

SCENARIO	METHODOLOGY	DESCRIPTION
Cumulative effect of immaterial cost impact on individual contracts is considered material; reflecting full impact on each contract is not desired	Net Cost Increase or Decrease Adjustment Technique	Offset all increases against all decreases by contract type, increased costs from one group against decreased costs from other groups; prorate net increase or decrease over selected, or all contracts

Cost impact on each contract is considered material; pricing stability on each contract is desired	Individual Contract Adjustment Technique	Adjust each contract, upward or downward, to reflect the cost shift
Cumulative impact on some individual contracts is material, cost impact on others is material	Some Combination of Two Previous Methods	Split contracts into two groups, adjust those whose individual impacts are considered material individually; prorate net increase or decrease cumulative cost impact on others to selected, or all contracts

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